

**Quant:**

**1. The value of  $1/5 - 1/10 =$**

**A. 0.1**

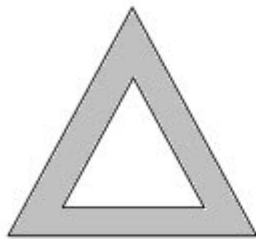
**B. 0.2**

**C. 0.5**

**& so on.....**

**Ans: A**

**2.**



**If the base length and height of a bigger triangle are 4 & 5, and if the base length and height of smaller triangle are 3 & 3, then what is the area of the shaded region?**

**Ans: 5.5**

**3. Given 'n' is a positive integer. What is the least value of n, such that the product  $12n$  should be a perfect square of some integer?**

**Ans: 3**

**4. A group can charter a particular aircraft at a fixed total cost. If 36 people charter aircraft rather than 40, then loss per person is 12\$. What is cost per person if 40 people charter it?**

**Ans: 108\$**

5. Col A:  $(0.9/1.1)^2 + (1.1/0.9)^2$

Col B: 2

Ans: A

6. If slope of a line XY is  $-1/2$ , then

Col A: X-intercept of Line

Col B: Y-intercept of Line.

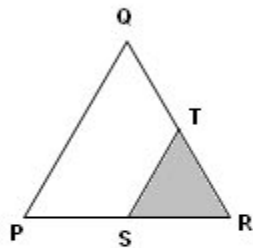
Ans: D

7. If the median of seven consecutive integers is  $2n+2$ , then find the Arithmetic mean of the sequence?

Ans:  $2n+2$

Quant:

1.



Given that, if the area of the triangle STR is  $1/9$ th area of the equilateral triangle PQR, then what is the ratio of QT/TR?

- A. 1:3
- B. 3:1
- C. 2:1
- & so on.....

**Ans: C**

2. Given a set of five numbers 27, 29, 35, 9, 25 & 16, on increasing each number by 'K' if the new mean of the set becomes 29.5, then what is the new median?

**Ans: 32**

3. 3. If  $a_1=2$  and  $a_{n+1} = (a_n-1)^2$ , then what is the value of  $a_{15}$ ?

- A.  $2^8$
- B.  $2^{16}$
- C.  $2^{32}$
- D.  $2^{128}$
- E.  $2^{256}$

**Ans: D**

4. Given that, if  $|x| = |y|$  and  $xy < 0$ , then

Col A:  $x-y$

Col B: 0

**Ans: D**

5. If the equation of two lines 'L' & 'M' are  $7x - 4y = 1$  and  $10x + 5y + 3 = 0$ , then

Col A: Slope of the line 'L'

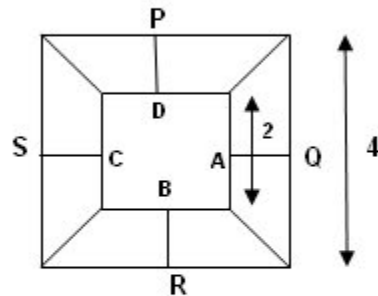
Col B: Slope of the line 'M'

**Ans: A**

6. Given that an amount of 2000\$ is given for annual interest at rate of 'r'%. If 150\$ is received as an interest for 1 year then find the rate of interest 'r'%?

**Ans: 7.5%**

7.



Given P, Q, R, S and A, B, C, D as midpoints of bigger square and smaller square respectively, if on joining these midpoints, if 8 trapeziums are formed as above, then find the perimeter any one of the trapezium?

**Ans:  $4 + \sqrt{2}$**

8. Given volume of a cube as some value(xxx) and asked to find the lateral surface area of the cube?

1. The product of prime factors of 300.

A. 15

B. 30

C. 45

& so on....

**Ans: B**

2. If 'P' is the probability of an event occurring,  $P^*$  is the probability of not occurring an event and if  $P > 0.5$ , then

Col A: PP\*

Col B: P

Ans: B

3. If (2,1) is the centre of the circle and (9,1) is the point on the circumference, then what is the radius of the circle?

Ans: 7

4. In a bottle of 3 red, 4 green and 5 blue marbles, if 2 marbles are taken out, what is the probability that two marbles are of red color?

Ans:  $\frac{3 \times 2}{12 \times 11}$  (or)  $\frac{1}{22}$

5. Given A = {6, 6, 9, 10, 14, 15}

B = {7, 9, 10, 11, 14, 15}

Col A: Standard deviation of A

Col B: Standard deviation in B

Ans: A

6. Given a series of numbers x, y, z, 0, 1, 1, 2, 3, 5, 8.....If every number in the series is sum of the preceding two numbers, then what is value of x?

Ans: 2

7. Given that there are two boats X and Y which start at the same point. If boat X travels due north at a rate 3 miles/hr and boat Y travels due east at a rate of 4 miles/hr, then at what time will the two boats be 10 miles apart?

Ans: 2hrs

Quant:

1. If the sum of a two digit number 'n' is  $\frac{n}{4}$ , then

Col A: n

Col B: 36

Ans: D

2. If A = {5, 12, 34, 35, 56, 34, 34, 48, 3} and

B = {3, 45, 3, 4, 53, 56, 93, 23, 45, 5}

Col A: The  standard deviation of A

Col B: The standard deviation of B

Ans: B

3. Given that, if a number x leaves remainder 7 when divided by 11 and leaves remainder 1 when divided by 5, then

Col A: Least possible value of  $x$

Col B: 40

Ans: A

4. If a line of slope  $-1/3$  passes through the points  $(1, p)$  and  $(4, 5)$ , then what is the value of  $p$ ?

Ans: 6

5. If  $a_1 = 2$  and  $a_{n+1} = (a_n - 1)^2$ , then find the value of  $a_{17}$ ?

Ans:  $2^{256}$

6. Two cyclists are moving towards each other at 10 miles/hour. When they are 50 miles apart, a fly starts from one cyclist and move towards other, moving to and fro till the two cyclists meet each other. If the fly is moving at the rate of 15 miles/hour, then find the total distance covered by the fly?

Ans: 37.5

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Admin,  
drrajusgre.com

Quant:

1. In a company, there are 54 members. If Wednesday has more number of birthdays than on any other day of the week, then

Col A: The least number of birthdays on Wednesday

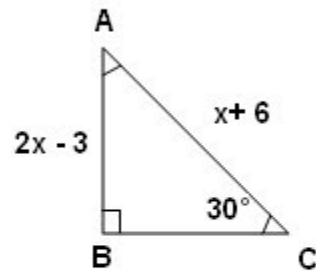
Col B: 8

Ans: A

2. In a set of 5 numbers, if 7 is the median, 4 is the mode and mean of the largest & second largest number is 20, then what is the average of the set?

Ans: 11

3.



What is the value of  $x$ ?

**Ans: 4**

4. If  $w > 0$  and  $z > 0$ , then

Col A:  $w^4 + z^3$

Col B:  $w^2 + z$

**Ans: D**

5. Given a circle which passes through the points  $(0, 6)$  and  $(8, 0)$ , then

Col A: Radius of the circle

Col B: 10

**Ans: D**

6. A salesman of a company gets 12% commission on the sales up to \$ 500 and he gets 20% commission on the further sales amount on that day. If the salesman's total commission is \$380 on that day, then how much amount did he sell on that day? (Something similar to this)

**Ans: \$2100**

7. If ' $n$ ' is positive integer, then

Col A: The unit place of  $[156]^n$

Col B: The unit place of  $[165]^n$

Ans: A

8. Given that there are 'x' boxes and the balls are arranged in such a way that no ball is left. If the number of boxes is reduced by 3 and if 12 balls are arranged in them, then 5 balls are left behind, what is the original number of boxes 'x'?

1. If the sum of a list of 12 distinct positive even numbers is 156, then

Col A: Range of the twelve numbers

Col B: 20

Ans: A

2. Given a parabola  $y = x^2 - 3$  which intersects y-axis at one point. If a point in xy-plane is P (2, k), then find the distance between the point P and the intersecting point on y-axis?

Ans:  $2\sqrt{5}$

3. Given a sum of Rs. 20,000, if two persons 'A' and 'B' lends amount for interest

Col A: The interest 'A' gets, if the  rate of interest for first year is 4% and second year is 6%

Col B: The interest 'B' gets, if the rate of interest for first year is 6% and second year is 4%

Ans: C

4. If  $63^n$  is divisible by  $3^{16}$  then

Col A: n

Col B: 7

Ans: A

5. A teacher teaches biology for a group of 53 students. She can divide them into two batches P and Q. If P has 7 batches of n students each and Q has x students of five batches; or six batches (with y students in 5 batches and (y+1) students in 6th batch), then

Col A: x

Col B: n

Ans: A

6. If  $f(n+3)=f(n)$  and  $f(-1)=6$



$$f(0) = 5$$

$f(1) = 4$ , then what is the value of  $f(8)$ ?

**Ans: 6**

7. Col A: 1.5 % 0.4 % 500

Col B: 15 % 4 % 5

**Ans: C**

8. A person (xxx) wrote a phone number on a note and that was later lost. When he try to recollect, he can remember that the number had 7 digits, the digit '1' appeared in the last three places and digit '0' did not appear at all. What is the probability that the phone number contains at least two prime digits?  
(Some thing like this)

9. Given a series -9, 10, -11, 12, -13, 14, -15.....

Col A: The sum of the series till 100

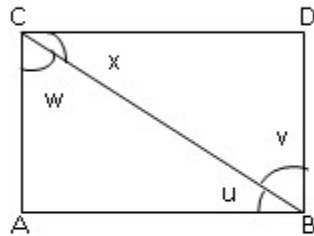
Col B: 45

**Ans: B**

1. Given that the mean of a group of 50 members as 100. If the mean of first 20 members is 80 and the mean of next 15 members is 90, then what is the mean of remaining members of the group?

**Ans: 136.66**

2.



If AB and CD are two parallel lines, then which of the following is true?

A.  $u = v$

B.  $w = x$

& so on.....

**Ans: True for  $u = x$  and  $v = w$**

3. In a [college](#), the average of senior students is 80 and average of junior students is 90. If both are combined,

Col A: The average of the combined [students](#)

Col B: 85

**Ans: D**

4. Given that a train is moving at a speed of 100km/hr. What is the speed in m/sec?

**Ans: 27.7m/sec**

5. In a coordinate [system](#), if three points (5, 3), (x, 4) and (3, 2) lie on a same line, then find a value of x?

**Ans: 7**

6. What is the y-intercept of the line  $4x - y = 4$ ?

**Ans: -4**

7. There are 3 hangers and 5 shirts in a room. In how many ways, can these 5 shirts be arranged among the three hangers?

**Ans:  $3^5$**

(Similar to this)

1. If  $[(x)]^{-1} - [(y)]^{-1} = [(xy)]^{-1}$

Col A: x

Col B: y

Ans: B

2. Given that, N is the five digit number which can contain number 1, 2, 3, 4, 5, 6, 7 without repetition.

Col A: N

Col B: (7)(6)(5)(4)(3)(2)

Ans: B

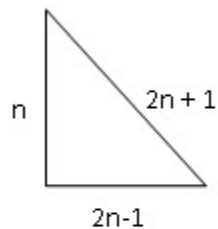
3. There is a series 'S' with 'n' positive  integers, where  $|n-5| < 3$ .

Col A: Mean of the n integers

Col B: Median of the series

Ans: C

4.



Given  $n$ ,  $2n-1$  and  $2n+1$  as the sides of a right angled triangle. Find the length of the hypotenuse?

A. 8  
B. 17  
C. 19  
& so on.....

**Ans: B**

5. Col A:  $2^8 3^{15} + 2^8 3^{15}$   
Col B:  $6^9 3^6$

**Ans: C**

6. Col A: 0.2% of 300  
Col B:  $1/500$  of 300

**Ans: C**

7. Given that, the length of the rope A is between 1.2 to 3.2 and length of rope B is between 0.8 to 2.8.

Col A: Length of rope A

Col B: Length of rope B

**Ans: D**

8. The points P, Q, R are 3 points in a plane, the distance PQ is 15 and distance QR is 10.

Col A: Distance between points P & R.

Col B: 20

**Ans: D**

9. If the roots of the equation  $2y^2 + 5y = 3$  are -3 and  $1/2$ , then what are the roots of the

equation  $2[(y - 2)]^2 + 5(y - 2) = 3$ ?

**Ans: -1,  $5/2$**

10. Given six teams like instrumental 1, instrumental 2,.....so on..... in a musical competition with 5 judges and their respective scores are 31, 24, 14, 10, 43 and 47. What is the minimum number of teams which must get 7 or more than 7 score from any one of the judge?

A. 2  
B. 3  
C. 4  
& so on.....

**Ans: B**

11. In a rectangular coordinate [system](#), if a line passes through the points (-10,-18 ), (20, 22) and (x, 2) then what is the value of x?

**Ans: 5**

In question 3, it only says tat there are n positive  integers.

According to the condition, n can take values: 3,4,5,6,7.

tat is, series S can have either 3 or 4 or 5 or 6 or 7  integers.

How can u say tat the mean and the median of the series will be the same?? We don evn kno for sure

how many numbers are there in 'S' or if they are evn consecutive  integers..

Pls explain.

#### Quant:

**1. A painting 4.5ft x 1.5ft is to be bordered with a 3inches wide wooden strip. What is the minimum length of the strip required to border the painting?**

**Ans: 12**

**2. If  $x < 0$  and  $y \neq 0$ , then**

**Col A:  $xy^2$**

**Col B: 0**

**Ans: B**

**3. Col A:  $0.99999/0.99998$**

**Col B:  $1.0002/1.0001$**

**Ans: A**

**4. If  $-8 \leq n \leq 10$ ;  $m + n = 4$ . Find the least possible value of  $mn$ ?**

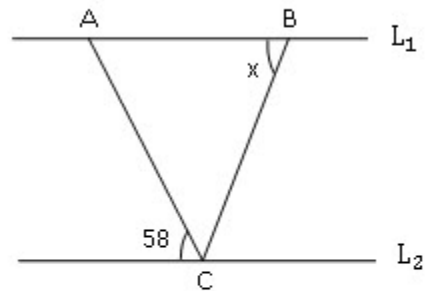
**Ans: -96**

**5. Col A: Standard Deviation of numbers having an average 40**

**Col B: Standard Deviation of numbers having an average 35**

**Ans: D**

**6.**



If  $L_1$  and  $L_2$  are two parallel lines and  $AB = BC$ , then

Col A:  $x$

Col B: 60

**Ans: A**

**Quant:**

1. Given the standard deviation of a set of five numbers  $p, q, r, s, t$ , where  $p = q$  is 'm' and standard deviation of set of numbers  $p, q, r, s, t$ , where  $p \neq q$  is 'n'.

Col A: m

Col B: n

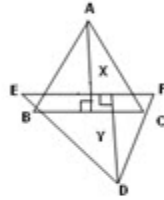
**Ans: D**

2. If a set of 10 parallel lines are intersected by a set of 13 other parallel lines, then find the number of parallelograms formed?

(Similar to this)

**Ans:  $10C2 * 13C2$**

3.



If  $x = y$  and  $EF \parallel BC$ , then

Col A: Area of triangle  $ABC$

Col B: Area of triangle  $DEF$

**Ans: D**

4. On the occasion of a certain meeting, each member exchanged shake hand with one another. If the total shake hands were 21, then how many members are there in the meeting?

(Similar to this)

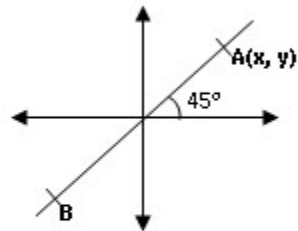
**Ans: 7**

5. Given a figure PQRS of area 400 and a circle of diameter 40 is inscribed in it and the area outside the circle and within the PQRS is shaded. Find the area of shaded region?

(Something like this)

**Data insufficient**

6.



If point 'B' is mirror image of point 'A', then what is the 'B' coordinate?

- A.  $(-x, y)$
  - B.  $(x, -y)$
  - C.  $(-x, -y)$
- & so on.....

**Ans: C**

7. Given A's speed as 50 km/h and B's speed as 55 km/h, if 'A' covers distance in 5 hours, then in how much time 'B' takes to cover the same distance?

**Ans: 4.5hrs**

**Quant:**

1. Col A:  $\frac{1}{97} + \frac{1}{98} + \frac{1}{99} + \frac{1}{100}$

Col B:  $\frac{1}{25}$

**Ans: A**

2. Given three points in a coordinate [system](#)  $P(x, 0)$ ,  $Q(0, y)$  and  $R(5, 5)$ .



Col A:  Distance between points P and R

Col B: Distance between points Q and R

Ans: D

3. Given that 'Y' is the sphere with 'y' as radius and 'X' is the sphere with 'x' as radius. If volume of sphere 'X' is 9 times the volume of sphere 'Y', then

Col A: x

Col B: y

Ans: A

4. If  $np \neq 0$ , then

Col A:  $(n + p)^2$

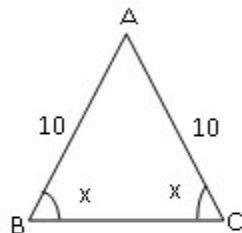
Col B:  $(n^2 + p^2)$

Ans: D

5. Given x-intercept of a line as 'r' and y-intercept of a line as 'n'. What is the slope of the line?

Ans:  $-n/r$

6.



Col A: Length of third side

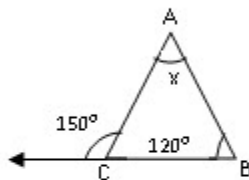
Col B: 10

Ans: D

7. What is the value of  $(\sqrt{7})^{-2} - (\sqrt{8})^2)^{-1}$  ?

**Ans: -7/55**

8.



What is the value of x?

**Ans: 30degrees**

9. Given that, if  $252^5$  is divisible by  $6^n$ ; n is a positive integer.

Col A: The largest possible integer value of 'n'

Col B: 10

**Ans: C**

10. Given that a person having two assets, sells one asset at  $\$21 \times 10^4$  making 25%

profit and other at  $\$21 \times 10^4$  loosing 25%. What is the difference between the sum of

initial assets value and  $\$42 \times [10]^4$ ?

**Ans: 28,000**

11. Given a number "7N" is a two digit number and is a multiple of 4. If "7N" lies between 45 and 75, then what is the value of N?

**Ans: 8**

**Quant:**

1. Given volume of sphere is  $\frac{4}{3} \pi r^3$ . If the radius of sphere is 10, find the volume?

**Ans:  $4000\pi/3$**

2. Given 'n' is an integer. If  $n \neq 0$ , then

Col A:  $2^{2 \times n}$

Col B:  $2^{3 \times n}$

**Ans: D**

3. Given a 



 Table.

Rank ---- No. of people

1 ----- 10

2 ----- 30

3 ----- 140

4 ----- 25

5 ----- 30

Col A: Average Rank

Col B: 3

**Ans: C**

4. Given a set of numbers -14, -7, -2, 12, 16, 20.

I. 



 Standard Deviation > Mean

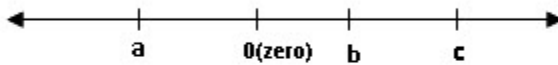
II. Standard Deviation < Median

III. Mean = Median

A. I only

B. II only  
C. I and II  
& so on.....  
(Similar to this)

5.



- A.  $a + b > a + c$
- B.  $a + c > b + c$
- C.  $b + c < a$
- D.  $ab > bc$
- E.  $ab > ac$

**Ans: E**

6. How many cubes with least possible dimensions can be formed from a rectangular cuboid of dimensions  $7 \times 6 \times 3$ ?

- A. 14
- B. 42
- C. 126
- & so on.....

**Ans: C**

7. Given area of a rectangle as 25,000. If the length of the rectangle is increased by 5% and breadth is increased by 10%, then what is the new area of the rectangle?

**Ans: 28875**

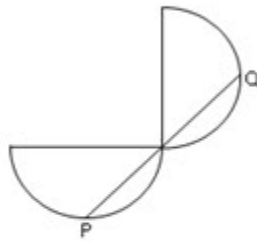
8. If  $25\%(20\%(x)) = 1450$ , then what is the value of  $x$ ?

- A. 29
- B. 290
- C. 2900
- D. 29000
- E. 290000

(Similar to this)

**Ans: D**

9.



Given 'P' and 'Q' as midpoints on the circumference of two semi-circles of same radius '2', find the distance between 'P' and 'Q'?

**Ans:  $4\sqrt{2}$**

10. Given a [table](#)

Interval of Age ----- Number of people

0 – 9	10
10 – 19	140
20 – 29	12
30 – 39	16
40 – 49	18
50 – 59	5

What is the mode age interval?

- A. 10 – 19
- B. 30 – 39

- C. 40 – 49
- D. 50 – 59
- E. Cannot be determined

**Ans: A**

11. For which values of 'n' the following equation are odd.

- A.  $n^2 + 1$
- B.  $n^3 + 1$
- C.  $n^4 + 1$
- D.  $n^5 + 1$
- E. Cannot be determined

(Similar to this)

**Ans: E**

12. Given a square inscribed in a circle of radius 'r', find the perimeter of the square?

**Ans:  $4\sqrt{2}r$**

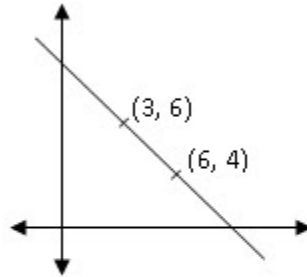
1. Given that a number 'N', when divided by 5 gives remainder 4 and when divided by 11 gives remainder 3, what is the number?

**Ans: 69**

2. Given  $a_1 = 2$  and if  $a_n = a_{(n-1)} + 4$ , then what is the value of  $a_{19}$ ?

**Ans: 74**

3.



Find the y-intercept of line?

**Ans: 8**

4. Given a rectangle of area 25,000. If the length of the rectangle is increased by 15% and breadth is decreased by 5%.

Col A: Area of the new rectangle

Col B: given some value (XXX)

**Ans: 27312.5**

5. Given that, a committee of 5 members is to formed from 5 faculty members and 6 students. Find the number of ways of selecting the committee, such that there should be 3 students and 2 faculty members?

**Ans: 200**

6. The value of  $[(\sqrt{7})]^{(-1)} - [(\sqrt{8})]^{1} = ?$

7. Given that, if  $252^5$  is divisible by  $6n$ ;  $n$  is a positive integer.

Col A: The largest possible integer value of 'n'

Col B: 10

**Ans: C**

8. What is the value of  $1/(1/6 + 1/6 + 1/6)$  ?

**Ans: 2**

9. Given a right angle triangle with sides  $n$ ,  $2n - 1$  and  $2n + 1$ . Find the value of  $n$ ?

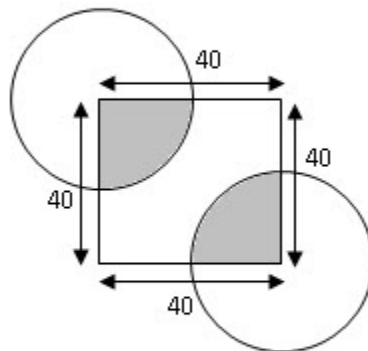
**Ans: 17**

10. Col A:  $[10]^{18} - [10]^{16}$

Col B:  $11 \times [10]^{16}$

**Ans: A**

11.



Col A: Area of shaded region

Col B: 1000

**Ans: D**

12. Given a rope of length 10m and is divided into four parts.

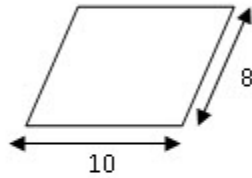


Col A: Sum of length of longest part and shortest part

Col B: 5

Ans: D

13.



Col A: Area of parallelogram

Col B: some value (XXX)

Ans: D

14. If  $a_n = 1/(n - 1/(n+1))$ , then what is the value of  $a_{18}$ ?

Ans: 19/341

And Few Previous [Database](#) Questions Appeared.

Quant:

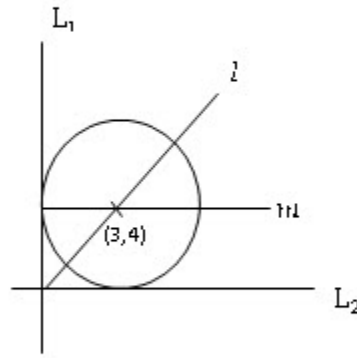
1. If  $a_n = 1/(n) - 1/(n-1)$ , then

Col A:  $1/a_4 + 1/a_5 + 1/a_6 + 1/a_7 + 1/a_8 + 1/a_9$

Col B:  $1/6$

Ans: B

2.



Given that,  $L_1$  and  $L_2$  are two tangents to the circle and point  $(3, 4)$  is the centre of the circle.

Col A: Slope of the line  $l$

Col B: 1

Ans: D

3. Given that ' $x$ ' books were bought for \$1 each and  $y$  books were bought for \$3 each, how many maximum number of books can be bought for \$40?

Ans: 40

If it is given as.... At least one book of each type should be included, then answer is 38

4. Col A:  $\frac{1}{97} + \frac{1}{98} + \frac{1}{99} + \frac{1}{100}$

Col B:  $\frac{1}{25}$

Ans: A

5. Col A: Area of the circle whose diameter is 10

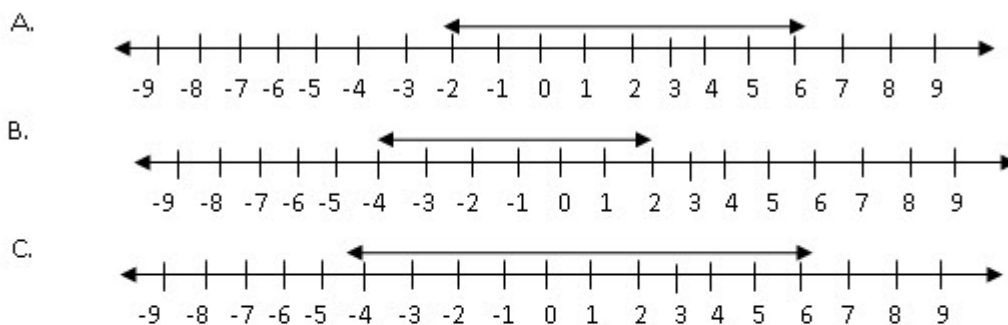
Col B:  $\frac{2}{3}$  times the area of a square whose diagonal length is 8  
(similar to this)

Ans: A

6. If  $-1 < a < 0$ , then what is the median of the set  $A: \{a^2, a^3, a, -1, 1\}$ ?

Ans:  $a^3$

7. If  $|x + 1| < 3$ , then what is the range of ' $x$ ' value?



& so on.....

**Ans: B**

**Quant:**

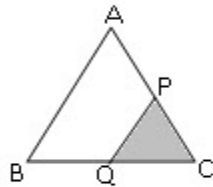
**1. Given  $f(x) = x + 1$**

**Col A:  $f(x^2)$**

**Col B:  $[(x + 1)]^2$**

**Ans: D**

**2.**



**Given the ratio of area of triangle ABC to PQC as 9:1. What is the ratio of their sides?**

**Ans: 3:1**

**3. Given slope of an equation  $y = mx + c$  as  $-3/4$ . Which of the following equation's slope is not equal to the given line slope?**

**And five equations are given as options.**

**(Something like this)**

**4. What is the value of  $1/(1/6 + 1/6 + 1/6)$ ?**

**Ans: 2**

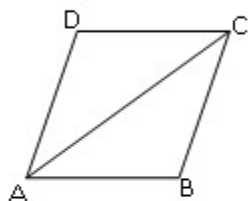
**5. Given the probability of happening an event A is 0.80 and event B is 0.60.**

**Col A: The Probability of happening event A or B**

**Col B: 0.92**

**Ans: C**

**6.**



If  $BC = AD$ , then

Col A: Angle ABC

Col B: Angle ADC

**Ans: D**

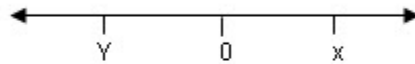
7. Given equations of two lines, line 'l' as  $3x + 5y + 3 = 0$  and line 'm' as  $3x - 5y + 3 = 0$ .

Col A: Slope of line 'l'

Col B: Slope of line 'm'

**Ans: B**

8.



Col A:  $xy$

Col B:  $x + y$

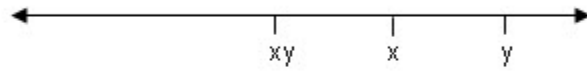
**Ans: D**

9. Given the average of 6 persons age as 32. If a 7th person of age 'k' is included, the average becomes 36. Find the value of 'k'?

(Similar to this)

**Ans: 60**

10.



**Col A: Distance between 'xy' and 'x'**

**Col B: Distance between 'x' and 'y'**

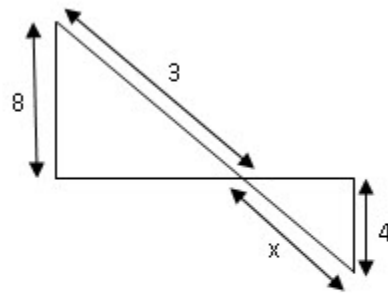
**Ans: D**

**Quant:**

**1. What is the value of  $|-1| - |-5|$ ?**

**Ans: -4**

**2.**



What is the value of  $x$ ?

**Ans: Cannot be determined from the given data.**

**If the line of length 8 is parallel to line of length 4, then the answer is  $3/2 = 1.5$**

3. Given that, if  $252^5$  is divisible by  $6^n$ ;  $n$  is a positive integer.

Col A: The largest possible integer value of ' $n$ '

Col B: 10

**Ans: C**

4. Given that, perimeter of square is equal to perimeter of circle.

Col A: (Area of square)/(Area of circle)

Col B: 1

**Ans: B**

5. If  $n < 0$  and  $ab = 1$ , then

Col A:  $a^n$

Col B:  $1/b^n$

**Ans: C**

6. Given  $a_1 = 3$  and if  $a_n = a_{n-1} + 4$ , then

Col A:  $a_{20}$

Col B: 79

**Ans: C**

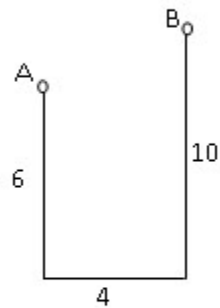


7. Col A:  $|x - 1|$

Col B:  $|x| + 1$

Ans: D

8.



As shown above, there are two poles of length '6' and '10'. Given 'A' and 'B' as two lights on the poles. Find the distance between the lights ('A' and 'B')?

Ans:  $4\sqrt{2}$

9.

For figure Check out the below.

[http://www.drrajusgre.com/quant\\_database.php](http://www.drrajusgre.com/quant_database.php)

If area of the square shown is 'x', then what is the area of the triangle?

A.  $2x$

B.  $\frac{1}{2}x$

C.  $\frac{2}{3}x$

D.  $\frac{1}{4}x$

& so on....

Ans:  $\frac{3x}{4}$

10. Given the standard deviation of a set of four numbers as zero. If each number in the set is added by 10 and divided by 7, then what is the new standard deviation?

Ans: Zero

11. If  $a(n) = 1/(n+1)$ , then find the value of  $a_4 + a_5 + a_6 + a_7$ ?

**Ans: 0.63(approx)**

12. Col A:  $[(a + b)]^3$

Col B:  $(a^3 + b^3)$

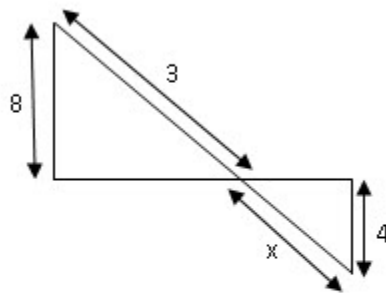
**Ans: D**

**Quant:**

1. What is the value of  $|-1| - |-5|$ ?

**Ans: -4**

2.



**What is the value of x?**

**Ans: Cannot be determined from the given data.**

**If the line of length 8 is parallel to line of length 4, then the answer is  $3/2 = 1.5$**

3. Given that, if  $252^5$  is divisible by  $6^n$ ;  $n$  is a positive integer.

Col A: The largest possible integer value of 'n'

Col B: 10

Ans: C

4. Given that, perimeter of square is equal to perimeter of circle.

Col A: (Area of square)/(Area of circle)

Col B: 1

Ans: B

5. If  $n < 0$  and  $ab = 1$ , then

Col A:  $a^n$

Col B:  $1/b^n$

Ans: C

6. Given  $a_1 = 3$  and if  $a_n = a_{n-1} + 4$ , then

Col A:  $a_{20}$

Col B: 79

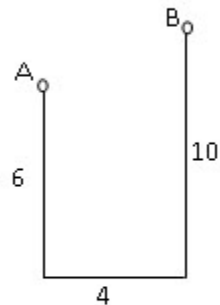
Ans: C

7. Col A:  $|x - 1|$

Col B:  $|x| + 1$

Ans: D

8.



As shown above, there are two poles of length '6' and '10'. Given 'A' and 'B' as two lights on the poles. Find the distance between the lights ('A' and 'B')?

**Ans:  $4\sqrt{2}$**

9.

**For figure Check out the below.**

[http://www.drrajusgre.com/quant\\_database.php](http://www.drrajusgre.com/quant_database.php)

If area of the square shown is 'x', then what is the area of the triangle?

A.  $2x$

B.  $\frac{1}{2}x$

C.  $\frac{2}{3}x$

D.  $\frac{1}{4}x$

& so on....

**Ans:  $\frac{3x}{4}$**

10. Given the standard deviation of a set of four numbers as zero. If each number in the set is added by 10 and divided by 7, then what is the new standard deviation?

**Ans: Zero**

11. If  $a(n) = \frac{1}{(n+1)}$ , then find the value of  $a_4 + a_5 + a_6 + a_7$ ?

**Ans: 0.63(approx)**

12. Col A:  $[(a + b)]^3$

Col B:  $(a^3 + b^3)$

**Ans: D**

**Quant:**

1. If  $n \neq 0$ , then which of the following is odd?

I.  $n + 3$

II.  $n^2 + 4$

III.  $n^3 + 5$

A. Only I

B. Only II

C. I and III

& so on...

**Ans: Cannot be determined from the given data**

2. In an equation  $x/7 + w/28 = 1$ , find the number of positive integer solutions?

A. 4

B. 5

C. 6

& so on.....

**Ans: C**

3. Col A:  $(5^{20} - 5^{19})/20$

Col B:  $5^{18}$

**Ans: C**

4. The value of  $(3.8 \times 6^{25} - 0.24 \times 6^{26})$  is .....

**Ans:  $2.36 \times 6^{25}$**

5. Col A:  $(n^3 (n - 1))/2$

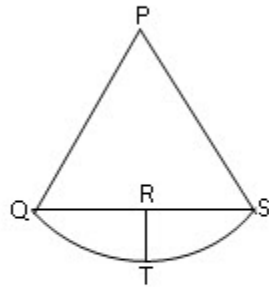
Col B:  $(n^3 (n + 1))/2$

**Ans: D**

6. Given a square is inscribed in a circle of radius 'r'. Find the perimeter of square in terms of 'r'?

**Ans:  $4\sqrt{2}r$**

7.



Given a figure of a sector of circle, with radius as 5cm and RT length as 1cm, then

Col A: QS

Col B: 6

(Similar to this)

Ans: C

8. Given that, there are 3 hooks and 5 paintings. In how many ways, can these 5 paintings be arranged among the three hooks?

Ans:  $3^5$

9. Given three points (12, 14), (-3, -13) and (k, 2) which are on the same [straight line](#). Find the value of k?

Ans:  $16/3$

10. The mean of 7 numbers is 33. If a new number 'k' is added, the average increases to 35.

Col A: k

Col B: 47

Ans: A

11. If 'k' is the last digit of  $3^n$  and 'x' is the last digit of  $7^n$ , then

Col A:  $|k - x|$

Col B: 3

**Ans: D**

12. Given T.S.A of a cube as 36.

Col A: Volume of the cube

Col B: 15

**Ans: B**

13. For all the odd numbers, the numbers  $n, n^2-1$  are multiples of which of the following?

A. -8

B. -9

C. -10

D. -11

E. -12

Quant:

1. Given three points (5, 3), (x, 4) and (3, 2) which lie on a same line. Find a value of x?

**Ans: 7**

2. If  $2n+1$  is the median of seven consecutive integers, then what is the mean of the integers?

**Ans:  $2n + 1$**

3. If  $x < y < z$ , then

Col A:  $xy$

Col B:  $yz$

**Ans: D**

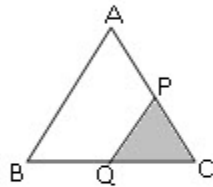
4. A person having two assets sells one asset at \$21 X 104 making 25% **profit** and other at \$21 X 104 loosing 25%,

Col A: The difference between the sum of initial assets and \$42 x 104

Col B: xxxxx (some value)

**Ans: 28,000**

5.



If the ratio of area of triangle ABC to PQC is 9:1, then what is the ratio of their sides?

A. 1: 1

B. 3: 1

C. 9: 1

& so on.....

(Appropriate Question)

**Ans: B**

6. Given  $P = (x)(x+1)(x+2)(x+3)$ ; where  $x$  is a positive integer, then

Col A: The remainder when  $P$  is divided by 3

Col B: 1

**Ans: B**

1. Given a fraction  $20/7$ . What is the digit at 57th decimal place of the given fraction value?

**Ans: 7**

2. In a triangle the three angles were given as  $X$ ,  $X$  &  $Y$ . If the average of two angles is 65, then what is the possible value of ' $Y$ '?

A. 65

B. 75

C. 80

& so on.....



**Ans: C**

3. Given  $f(x) = x^2 + x$ , then

Col A:  $f(x+1)$

Col B:  $f(x) + f(1)$

**Ans: D**

4. If the retail price is 35% more than  wholesale price and if the retailer sells it with a profit of 21% with that of wholesale price, then what percentage of discount did he offer to the customer?  
(Something like this)

**Ans: 10.3%**

5. If  $3^{16}$  is a factor of  $63^n$ , then what could be the least value of  $n$ ?

**Ans: 8**

6. If an article cost is 256\$ in 1989 and is increased by 80% when compared to 1975, then what was its cost in 1975?

**Ans: \$142.2**

7. If it takes 'a' hrs for 'x' to repair 1 machine and 'b' hrs for 'y' to repair 1 machine, then how many hours will it take to repair 750 machines, if they work together?

**Ans:  $750ab/a+b$**

8. If for a set of 15 elements, 'a' is mean and 'b' is median,  $a > b$ ;

If for another set of 25 elements, 'c' is mean and 'd' is median,  $c > d$ ;  
then, the

Col A: Combined Mean of the sets

Col B: Combined Median of the sets

**Ans: D**

9. If the standard deviation of  $x$ ,  $y$  &  $z$  is 'a' and the standard deviation of  $x+5$ ,  $y+5$  &  $z+5$  is 'b', then

Col A: a

Col B: b

**Ans: C**

10. A regular hexagon ABCDEFG is inscribed in a circle. If BE is the diameter of the circle, then

Col A: Length of BE

Col B: Length of BCD

**Ans: C**

**Quant:**

**1. If  $x < 0$  then the value of  $(-x)(-x)/(-x)$  is**

**A.  $|x|$**

**B.  $x$**

**C.  $x^2$**

**D. 0**

**& so on...**

**Ans: A**

**2. In every month, a hospital is opened only in last week. If 10 people travel through bus to hospital, then what is the probability that at least two people travel on the same day?**

**A.  $1/7$**

**B.  $2/7$**

**C. 1**

**D.  $6/7$**

**& so on...**

**Ans: C**

**3. If  $t^4 = 16$ , then**

**Col A:  $t$**

**Col B: 2**

**Ans: D**

**4. If the point (1, 2) lie on the line  $mx + ky = 3$ , then**

**Col A:  $k$**

**Col B: 0**

**Ans: D**

**5. If 'X' invests Rs.5000 at the rate of 6% for annual & 'Y' invests Rs.6000 at the rate 6% for semiannual, then**

**Col A: The interest 'X' gets for 1year**

**Col B: The interest 'Y' gets for 1year**

**Ans: B**

**6. If  $1 < r < s < t < 2$ , then  $r+(s*10^6)+(t*10^{12})$  is related to which of the following ?**

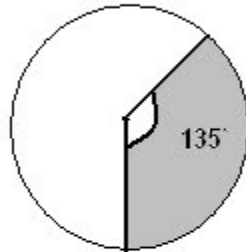
**A.  $(r+s+t)*10^{12}$**

**B.  $t^{12}$**

**C.  $(s+t)*10^8$**

**& so on...**

**7.**



If the circumference of the circle is  $16\pi$ , then find the area of shaded region?

**Ans: 75.36**

8. Given a ladder of length 5mts and it is displaced i.e slanted downwards, such that it falls 'x' mts in height and horizontal length increases by 'y' mts.

Col A: x

Col B: y

**Ans: B**

**Quant:**

1. If  $x^2 + y^2 = 10$  and  $xy=2$ , then

Col A:  $(x-y)^2$

Col B: 6

**Ans: C**

2. If  $p = (5/k)$  &  $q = (3/k)$ , then the value of  $(p/q)^2$  is?

**Ans: 25/9**

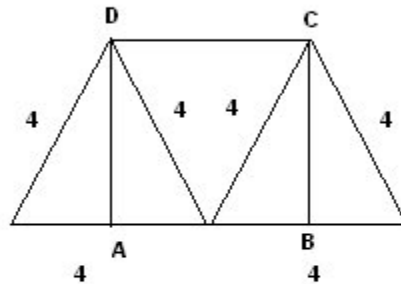
3. If  $x < y < z$ , then

Col A:  $xy$

Col B:  $yz$

Ans: D

4.



Given a figure of two equilateral triangles of side length 4, which forms a square ABCD as above

Col A: Area of square

Col B: Perimeter of square

Ans: C

5. Given volume of the cube and asked to find the area of the cube.

6. If  $t^4 = 16$ , then

Col A:  $t$

Col B: 2

Ans: D

7. In a rectangular co-ordinate [system](#), if the point (5, 5) is equidistant from point (x, 0) and point (y, 0), then

Col A: x-intercept

Col B: y-intercept

Ans: D

**Quant:**

**1. The greatest prime number by which  $(64^2 - 57^2)$  is divisible?**

**A. 7**

**B. 11**

**C. 13**

**& so on...**

**Ans: B**

**2. If the probability of some X person's success rate in doing a task is 0.8 and Y person is 0.7, then what is the probability that neither can do the task?**

**Ans: 0.06**

**3. Given a circle on coordinate axis with origin (0, 0) and radius 5. Find the number of points we could find on the circle?**

**Ans: 12**

**(Provided---- if the points taken are integers)**

**4. If  $10^{11} + 10^8 + 10^9 + 10^{10}$  is divisible by 11, then**

**Col A: The Remainder**

**Col B: 0**

**Ans: C**

**5. If the mean of  $x_1, x_2, x_3, x_4$  &  $x_5$  is 'm' & if the mean of  $x_1 - m, x_2 - m, x_3 - m, x_4 - m$  &  $x_5 - m$  is 'p', then**

**Col A: m**

**Col B: p**

**Ans: D**

**6. If  $x > 1$  and  $0 < y < 1$ , then**

**Col A:  $x^4 * y^4 / x^2$**

**Col B:  $x^2 * y^4$**

**Ans: C**

**7.  $\{(-x)*(-x)\} / (-x) =$**

**A.  $-|x|$**

**& four more options were given**

**Ans: A**

8. In total of 2000 students, if 'x' students passed in maths, 'y' students passed in physics and 'z' students passed in both, then how many students passed in neither of the subjects?

**Ans:  $2000 - (x+y-z)$**

9. If 6 members are to be selected in group of 4 children and 4 men, then

Col A: Probability of selecting 2 children and 4 men

Col B: Probability of selecting 3 children and 3 men

**Ans: B**

10. Col A:  $(x^2 - y^2) / (x-y)$

Col B:  $x + y$

**Ans: C**

11. If a solid cylinder of dimensions  $4 \times (1/2) \times (1/2)$  is converted into a solid cylinder of dimensions  $8 \times 2 \times h$ , then what is the value of 'h'?

**Ans:  $1/16$**

**Given a circle on coordinate axis with origin (0, 0) and radius 5. Find the number of points we could find on the circle?**

**Ans: 12**

**(Provided---- if the points taken are integers)**

**Sol: Given radius = 5**

**So, the Equation of the circle is  $x^2 + y^2 = 25$**

**For the point to lie on the circle it should satisfy the above equation.**

**So,**

**The points which satisfy the equation are**

**(0, 5),**

**(-3, 4), (-4, 3), ----II quadrant**

**(-5, 0),**

**(-3,-4), (-4,-3), ----III quadrant**

**(0, -5),**

**(3, -4), (4, -3), -----IV quadrant**

**(5, 0),**

**(3, 4) & (4, 3). -----I quadrant**

**Totally 12 points.**

**(Provided ---- if (only)integers are to be considered).**

Quant:

1. A line was drawn through a point on x-axis  $(a, 0)$  and a point on y-axis  $(0, b)$ . A line parallel to x-axis was given. If the distance between  $(0, b)$  to this line was  $k$  and if the point where this parallel line intersects the earlier line was  $(x, y)$ , then find the value of  $x$  and  $y$ ?

Ans:  $x = ak/b$ ;  $y = b - k$

2. If the median of 7 consecutive even integers is  $2n+2$ , then what is the mean?

Ans:  $2n + 2$

3. Given 60% of the sophomores took up liberal arts, 24% took sciences and rest took both or neither. If 55% of all sophomores took psychology, then what percentage of arts students took psychology?

Ans: Cannot be determined

5. If  $t = \{2, 3, 4, 5, 6, 7, 8\}$ , then the number of 4 digit numbers that can be formed without repetition is?

Ans:  $7p4$

6. If  $0.6 < x < 0.8$ , then

Col A:  $x$

Col B:  $(0.73)^2$

Ans: A

7. If  $|x| < |y|$ , then

A.  $x + y = 0$

B.  $x + y \neq 1$

C.  $x < y$

D.  $x - y = 0$

& so on...

Ans: Not in the given options

8. Given a semicircular path. If Joe traveled through curved area in 2 min and Jack traveled through straight line in 1 min, then

Col A: Average Speed of Joe

Col B: Average Speed of Jack

Ans: B

9. Col A:  $x$

Col B:  $x^3$

Ans: D

10. Given  $3 + 33 + 333 + 3333 + \dots$  up to 10 terms. After the summation, what is the

value in hundredth digit?

**Ans: 7**

11. If the retail price is 35% more than wholesale price and if the retailer sells it with a profit of 21% with that of wholesale price, then what percentage of discount did he offer to the customer?

(Something like this)

**Ans: 10.3%**

**Quant**

1. For  $(-x)(-x) / (-x)$ ,  $x < 0$  the value of  $x$  is

A.  $|x|$

B.  $-|x|$

& 3 more options

**Ans: B**

2. On wholesale, if a shopkeeper had a 30% increase followed by 20% decrease, then how much was his total increase/ decrease?

**Ans: 4% Increase**

3. Given a circle with triangle ABC inscribed in it. If AB = diameter & CB = 5, then find the area of triangle?

**Ans: From the given data, it cannot be determined.**

4. The Value of  $0.00865 = ?$

A.  $8.6 \times 10^{-1}$

B.  $8.6 \times 10^{-2}$

& 3 more options were given

**Ans:  $8.6 \times 10^{-3}$**

5. If 'n' is a positive integer, then

Col A:  $(2r)^n$

Col B:  $(2r)^{3n}$

**Ans: D**

6. If the probability of raining on 1st day is 0.8 and the probability of raining on 2nd day is 0.6, then what is the probability of not raining on any of these days?

(Something like this)

**Ans: 0.08**

7. The area of the triangle formed by x-axis, y-axis and the line  $x+y = 4$  is ?



**Ans: 8**

8. Given 'A' has 'x' toys inserted in 'y' boxes and 'B' has 'y' toys inserted in 'x' boxes.

Col A: Number of toys 'A' has - Number of toys 'B' has

Col B: 0

**Ans: C**

9. If  $(x + y) = 8$  and  $2*(y^2) = 32$ , then

Col A: x

Col B: 4

**Ans: D**

10. The largest prime number by which  $64^2 - 57^2$  is divisible?

A. 7

B. 11

C. 13

& so on....

**Ans: B**

11. If  $\ln + 2l = n + 6$ , then find the possible value of n?

**Ans: -4**

12. If  $a \# b = 3a + 2b$ , then

Col A:  $(0 \# 1) \# 2$

Col B:  $0 \# (1 \# 2)$

**Ans: B**

13. Set A: {15, 16, 17, 18, 19, 20, 21}

Set B: {10, 11, 12, 13, 14}

If each number of set A is added to a number of set B, then (after the addition) how many numbers are uniquely formed?

**Ans: 11**

14. Given a big square, in which 16 small squares were inscribed. The small ones which had only 1 side covered with perimeter of big square was shaded. If n is the number of such small shaded squares in a big square ( $n > 4$ ), then find the actual number of small squares within a big square?

A.  $4(n-4)$

B.  $4(n-2)$

C.  $2(n-4)$

D.  $2(n-2)$

& so on.....

(something like this)

**Ans: A**

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Last edited by admin on Thu Feb 12, 2009 6:32 pm; edited 1 time in total

**Quant:**

**1. Col A:  $2 * \{1/(\sqrt{2} + 1)/ \sqrt{2}\}$**

**Col B:  $2 + \sqrt{2}$**

**Ans: B**

**2. If  $0 < x < 1$ , then**

**Col A:  $(x^{-2})^{-3}$**

**Col B:  $(x^{-3}) / (x^{-2})$**

**Ans: B**

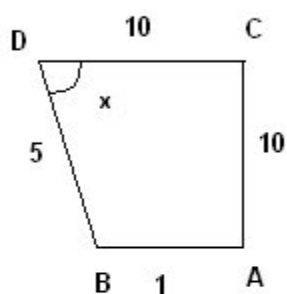
**3. If  $T = 2, 3, 5, 6, 7, 8, 9$ , then**

**Col A: Mean of T**

**Col B: Median of T**

**Ans: B**

**4.**



Given a figure of quadrilateral like above

Col A: x

Col B: 60`

**Ans: D**

5. The average of seven numbers is 35 then when k is added to it then the average of those 8 is 35. What is the value of k?

**Ans: 35**

6. If there are 'c' cartons and each carton has 'x' boxes which is being loaded in a truck in 'h' hours and 't' minutes, then

Col A : The average time for loading the 'x' boxes of all cartons

Col B:  $cx / (h+t/60)$

**Ans: D**

7. From a set of positive numbers 1 to 100, two numbers x & y are to be selected at random.

Col A: Probability that the two numbers x & y are even

Col B: Probability that the sum of two numbers selected is even

**Ans: B**

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**Quant:**

**1. Given a polygon with 9 equal sides & all angles are equal. If one side is extended, find the angle between the extension & the other side?**

**Ans: 40degrees**

**2. A set of 15 numbers has mean 'a' & median 'b' and another set of 25 numbers has mean 'c' & median 'd'. If the combined mean of two sets is 'e', then**

**A.  $a > b$**

**B.  $c > d$**

**C.  $e > f$**

**& so on....**

**3. Given a square of area 36. If a quadrilateral is formed by connecting mid points of two adjacent sides with a vertex, then**

**Col A: Perimeter of Quadrilateral formed**

**Col B: xx(some value is given)**

**Ans:  $12\sqrt{2}$**

**4. Given a quadrilateral with sides 9, 9, 8 & 1.**

**Col A: Angle between the sides 9 and 9**

**Col B: 60**

**Ans: D**

**5. Given a Table.**

**Measure Frequency**

**1 13**

**2 1**

**3 14**

**4 9**

**5 25**

**Col A: Median of the data**

**Col B: 4**

**Ans: C**

**6. If two sides of the triangle are 6 & 8, then**

**Col A: Third side of the triangle**

**Col B: 10**

**Ans: D**

**7. Given that heights of 60 men, 60 women both have normal distributions and if the**

**Standard Deviation of them is 10 each, then**

**Col A: Standard Deviation of a random sample of 30 men, 30 women**

Col B: 9

**Ans: D**

& few previous [database](#) questions.

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**Quant:**

1. Given  $8 + y = 2^n$ , where 'n' is a positive number. Which of the following will be correct value for Y?

A. -6

B. -4

& so on....

**Ans: To the given question, answer might be all the above.**

2. If  $3x - 3y = 1$ ; x and y are positive numbers, then

Col A:  $x/y$

Col B: 1

**Ans: A**

3. If  $(x+3)(x-3) = 4x+1$ , then what is the value of x?

**Ans:  $2 + \sqrt{14}$ ,  $2 - \sqrt{14}$**

4. If the area of the semi-circle is  $2\pi$ , then what is perimeter of the semi circle?

**Ans:  $2\pi + 4$**

5. Given a right angle triangle ABC whose adjacent sides are 'a', 'b' and hypotenuse 'c', then

Col A:  $a + c$

Col B:  $2b$

**Ans: D**

6. Given that 'A' completes a piece of work in 12 days and 'B' in 'x' days. When worked together, if they complete in 9 days, then what is the value of 'x'?

**Ans: 36**

7. If  $a_1 = 2$ ,  $a_2 = 3$  .....  $a_n = a_{(n-1)} - a_{(n-2)}$ , then what is the value of  $a_{150}$ ?  
(Here 1, 2, 150, n, n-1 & n-2 are suffixes)

**Ans: -1**

8. If  $1/x - 1/y = 1/xy$ , then

Col A: x

Col B: y

Ans: B

9. If  $0 < x < 1$  &  $0 < y < 1$ , then

Col A:  $x / x^{(-1)}$

Col B:  $y^{(-1)} / y$

Ans: B

10. If the average of  $x_1, x_2, x_3, x_4$  is 'S' and the average of  $y_1, y_2$  is 't', then the combined average of  $x_1, x_2, x_3, x_4, y_1$  &  $y_2$  is

A.  $s + t/2$

B.  $s + t$

C.  $s + t/8$

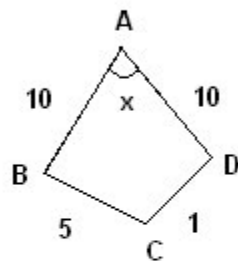
& so on.....

Ans:  $(2s + t)/3$

11. The value of  $5000 + \sqrt{\{(0.68) + (700.2)\}}$  is.....

Ans: 5026.4741

12.



Col A: x

Col B: 60`

Ans: B

Quant:

1. Given two concentric circles, such that a tangent to the smaller circle cuts the larger one at two points 'R' and 'S'. If the radius of smaller circle is 2 and larger circle is 5, then what is the length of segment 'RS'?

Ans:  $2\sqrt{21}$

2. If  $x < 0$ , then

Col A:  $2x^3 + 3x^2 + 5$

Col B:  $3x^2 + 5$

Ans: B

3. Given the two sides of a triangle as 6 and 5 that are opposite to 'x' and 'y' angles. If the length of the third side is given as 8, then

Col A:  $x + y$

Col B: 90

Ans: B

4. If the remainder when  $10^{32}$  is divided by 11 is 'R', then

Col A:  $R + 2$

Col B: 3

Ans: C

5. Given A's speed is 50 km/h and B's speed is 55 km/h. If 'A' covers distance in 5 hours, then how much time 'B' takes to cover the same distance?

Ans: 4.54

6. In a shop, if the discount provided is 40% on one jacket and 20% on one shirt, then

Col A: What is the percentage reduction in discount on two jackets and one shirt

Col B: 35%

Ans: D

7. If  $R$  = Set of prime numbers from 1 to 50,

$S$  = Set of multiples of 15 from 10 to 50,

$T$  = Set of odd numbers from 1 to 50, then

how numbers will be common in all the three sets?

Ans: None

**8. Given numbers 1, 2, 3, 4 & 5. What is the probability of choosing two numbers at random from the given numbers such that the sum of the two numbers must be an even number?**

**Ans: 2/5**

**9. Given a series -9, 10, -11, 12, -13. . . . .80, then**

**Col A: The sum of first 27 numbers**

**Col B: -22**

**Ans: C**

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**Quant:**

**1. If the retail price is 35% more than wholesale price and if the retailer sells it with a profit of 21% with that of wholesale price, then what percentage of discount did he offer to the customer?**

**Ans: 10.3%**

**2. If  $x > 1$  and  $0 < y < 1$ , then**

**Col A:  $x^4 * y^4 / x^2$**

**Col B:  $x^2 * y^4$**

**Ans: C**

**3. If  $x < 0$ , then**

**Col A:  $-x$**

**Col B:  $|x|$**

**Ans: C**

**4. Given 60% of the students passed in X subject, 50% of the students passed in 'Y' subject and 20% of the students passed in neither of the subjects. If 18 students passed in both the subjects, then how many students passed in neither of the subjects?**

**Ans: 12**

**5. If a number 'n' is divided by 11, it gives remainder 5. What is the remainder when 7n is divided by 5?**

**Ans: Cannot be Determined**



**Quant:**

**1. Col A: Standard Deviation of P1, P2, P3, P4 & P5**

**Col B: Standard Deviation of P1+5, P2+5, P3+5, P4+5 & P5+5**

**Ans: C**

**2.  $(-1)^{18} * (168)^{-1} =$**

**A.  $1/168$**

**B. 0**

**C. 168**

**D. -168**

**E.  $-1/168$**

**Ans: A**

**3. If  $x < y$ , then**

**Col A:  $x + x^2 + 1$**

**Col B:  $y + y^2 + 1$**

**Ans: D**

**4. If a train is moving at a speed of ' $x/6$ ' miles per ' $y$ ' sec, then what is the speed in minutes when moving at ' $Z$ ' miles?**

**Ans:  $Z*Y/10*x$**

**5. Given volume of a sphere 'A' as  $\frac{4}{3}\pi r^3$ . If the radius of the sphere 'B' is ' $2r$ ', then volume 'B' is how many times that of 'A'?**

**A. 0**

**B. 6**

**C. 8**

**& so on.....**

**Ans: C**

**6. For  $n/(5)*(n-1)$ ,  $n > 20,000$ . What would be the value of the given form?**

**A.  $1/5$**

**B.  $2/5$**

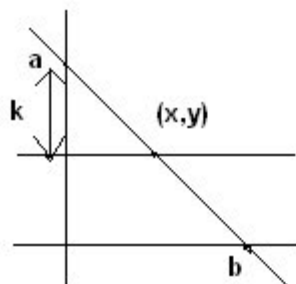
**C.  $5/2$**

**D.  $3/5$**

**& so on....**

**Ans: A**

**7.**



**What is the value of x & y in terms of 'k'?**

**Ans:  $x = bk/a$ ;  $y = a - k$**

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Admin,  
drrajusgre.com

Last edited by admin on Mon Feb 23, 2009 12:21 pm; edited 1 time in total

here y sec for x/6 miles,  
then in 60 sec =  $60x/6y = 10x/y$  miles/min

Now  $10x/y$  miles - 1 min

z miles =  $z/\{10x/y\} = zy/10x$  is answer..... 😊

---

Ketan Patel

1. If  $a > 1$ , then

Col A:  $a^2 - 1$

Col B:  $a + 1$

**Ans: D**

2. Col A: Standard Deviation of 23, 24, 25, 26, 26, 26

Col B: Standard Deviation of 25, 26, 27, 28, 29, 30

**Ans: B**

3. If a number is divisible by 5, the remainder is 3 & when the same number is divided by 7, the remainder is 4. What is the least possible number?

**Ans: 18**

4. Given  $A = \{\text{Set of odd integers less than 100}\}$

$B = \{\text{Set of positive even integers less than 5}\}$

$C = \{\text{Set which include product of both sets A and B}\}$

Col A: number of integers in set C

Col B: 100

**Ans: C**

5. If  $x < 0$  then the value of  $(-x)(-x)/(-x)$  is

A.  $|x|$

B.  $x$

C.  $x^2$

D. 0

E.  $-|x|$

**Ans: E**

6. A group of 1 professor and 3 students have to be made from 4 professor and 5 students.

Col A: Different ways in which the groups can be formed

Col B: 40

**Ans: C**

7. Given a right angle triangle ABC whose adjacent sides are 'a', 'b' and hypotenuse 'c', then

Col A:  $a + c$

Col B:  $2b$

**Ans: D**

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1. Given 'p' and 'q' are two points which are on the same side of 0 on the number line.

Col A:  $p+q$

Col B: 0

**Ans: D**

2. When a number 'w' is divided by 14, the remainder is zero. If 'w' is three lesser than its value and when divided by 15, its remainder is 14 then what is the value of 'w'?

**Ans: 182**

3. If an article cost is 256\$ in 1989 and is increased by 80% when compared to 1975, then what was its cost in 1975?

**Ans: 142.2**

4. If  $t^4 = 16$ , then

Col A: t

Col B: 2

**Ans: D**

5. Col A: The remainder when  $10^{32}+2$  is divided by 11

Col B: xx(some value)

**Ans: 3**

6. Given a triangle ABC and a point 'D' divides the side AB such that a triangle ADC is formed &  $AD/DB=1/3$ . If the area of the triangle ABC is r, then find the area of the triangle ADC in terms of r?

**Ans:  $r/4$**

1. Form a given set of numbers 2, 3, 4, 5, 6, 7, 8 & 9, find the number of ways of forming a four-digit number (without repetition)?

**Ans: 840**

2. If  $x > y$ , then

Col A:  $|x+y|$

Col B:  $|x-y|$

**Ans: D**

3. If  $(x-2)^{(x-4)} = 1$ , then

Col A:  $x$

Col B: 4

**Ans: C**

4. The value of  $5000 + \sqrt{6.9 * 7002.1}$  is .....

**Ans: Around 5220**

5. Given two groups G and M, G Group has 25000 people and M group has 30000 people. A total of 50000 people group is formed by using these two groups. If one person is selected from G group then what is the probability that he is also from M group?

**Ans: 0 (if they are disjoint groups)**

**Else it is 1/5**

6. A person 'B' types 2 papers in 3 seconds and a person 'C' types 1 paper in 1/2 sec. If they start working independently at same time. How many minutes will they take to type 8000 papers?

**Ans: 50min (or) 3000secs**

7. Given two points of a line as  $(3, k)$  &  $(5, m)$ . If the slope of the line is 4, then what is the relation between  $k$  &  $m$ ?

(Similar to this)

**Ans:  $m = 8 + k$**

8. If the mean of 30 numbers is 1.68 and the mean of first 20 numbers is  $xx$  (some value), then what is the mean of rest 10 numbers? (something like this)

9. Given lateral surface area of a cuboid and asked to find the volume of it?

3rd wrong answer

the equation satisfies when  $x=4$  and even satisfy when  $x=3$  so answers should be D

**Quant:**

**1. If  $10^n = 0.0004$ , then what is the value of  $n$ ?**

**Ans: Cannot be determined**

**But, if it is  $10^n = 0.0001$ , then  $n = -4$**

**2. If the price of an article is 256\$ in 1989 and is increased by 80% when compared to 1975, then what was its price in 1975?**

**Ans: 142.2**

**3. Col A: Standard Deviation of  $m_1, m_2, m_3, m_4$  &  $m_5$**

**Col B: Standard Deviation of  $m_1+5, m_2+5, m_3+5, m_4+5$  &  $m_5+5$**

**Ans: C**

**4. If the remainder when  $10^{32}$  is divided by 11 is 'R', then**

**Col A:  $R+2$**

**Col B: 3**

**Ans: C**

**5. If  $3x - 3y = 1$ ;  $x$  and  $y$  are positive numbers, then**

**Col A:  $x/y$**

**Col B: 1**

**Ans: D**

**6. If the area of the semi-circle is  $2\pi$ , then what is perimeter of the semi circle?**

**A.  $2\pi$**

**B.  $8\pi$**

**C.  $16\pi$**

**D.  $2\pi + 4$**

**E.  $4\pi + \sqrt{4}$**

**Ans: D**

**7. Which of the following has the highest slope**

**A.  $y - 1/4x = 5$**

**B.  $y - 1/2x = 2$**

**C.  $y + 2x = -3$**

**D.  $y + 7x = -6$**

**& so on.....**

**Ans: B**

**8. Given that 60% of the sophomores took up liberal arts, 24% took sciences and rest took both or neither. If 55% of all sophomores took psychology, then what percentage of arts students took psychology?**

**Ans: Cannot be determined**

**9. If  $2/x = y/2$ , then**

**Col A: X**

**Col B: Y**

**Ans: D**

both 5th and 6th answer is wrong

5th answer

two positive number when subtracted giving a positive number that means  $x > y$  hence  $x/y$  will be greater than 1 as a greater no is divided by smaller one hence answer is A

6th answer

since area of semi circle is  $2\pi$  it should be in this way

$2\pi = (\pi * r^2)/2$  from which  $r=2$

hence perimeter of a semi circle is  $=(2*\pi*r)/2=2\pi$  hence answer is A

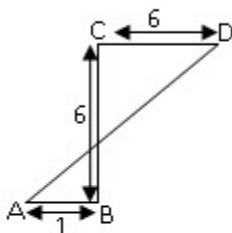
**1. Col A:  $1/25 + 1/26 + 1/27 + 1/28 + 1/29 + 1/30$**

**Col B: 0.2**

**2. Given a line AB of slope 2. What is the slope of other line CD perpendicular to line AB?**

**(Similar to this)**

**3.**



**What is the value of AD?**  
**(Similar to this)**

**4. Given  $(x + 1/x)/(1/(1-x)) = 99$ , find the value of x?**

**5. Given a cylinder with liquid in it. The height of the liquid in the cylinder, when erected is twice when cylinder is bent.**

**Col A: Volume of cylinder when erected**

**Col B: Volume of cylinder when bent**

**6. Given  $m = 4^x + 4^x + 4^x + 4^x$ . Find  $m^2$ ?**

**7.**



Value	Frequency
-3	3
-2	3
-1	3
0	7
1	3
2	3
3	3

Value	Frequency
-3	5
-2	4
-1	2
0	6
1	1
2	4
3	5

**Which of the following is equal in the above two tables?**

**A. Mean**

**B. Mode**

**C. Mean and Median**

**& so on.....**

**8. Col A:  $(5 + 1/4)^2 / (5 - 1/4)^2$**

**Col B: xxx (some value)**

[/b]

1. A

2.  $-1/2$  slopes  $m_1 * m_2 = -1$

3. sqrt 85 if AB perpendicular to CD

4. ?????

5. C

6.  $4^{(2x+2)}$

7 ?????

8  $21/19$

please check my answers

1) B IS THE ANSWER 0.2 IS GREATER

2)  $M = -1/2$  OF LINE CD AND M OF LINE AB IS 2

3)  $AD = \sqrt{85}$

4) I AM NOT ABLE TO GET THE VALUE OF X

5) C VOLUME WILL REMAIN THE SAME BUT THE HEIGHT OF THE LIQUID WILL DIFFER SINCE WHEN ERECT THE CYLINDER WILL HAVE HEIGHT "H" AND DIAMETER "D" AND WHEN HORIZONTAL THE CYLINDERS HEIGHT WILL BE THE DIAMETER OF THE CYLINDER.

6)  $2^{2x+2}$

7) TABLE 1. MEAN=0 MODE=0 AND MEDIAN=0(13TH)

TABLE 2. MEAN= $-1/27$  MODA=0 AND MEDIAN=0(14TH) THEREFORE MODE AND MEDIAN ARE EQUAL

8)  $21^2/19^2$

1. Given  $5^3w + 5^2x + 5^1y + 5^0z = 264$ . If  $w, x, y$  and  $z$  are positive integers less than 5. What is the value of  $w + x + y + z$ ?

A. 4  
B. 6  
C. 8  
D. 10  
E. 12

2. Col A:  $(-2)^{-3}$   
Col B:  $(-4)^{-3}$

3. Given two sets S: {22, 24, 27, 29, 32} and T: {222, 224, 227, 229, 232}. If standard deviation of S is X, then what is the value of T?

A. x  
B. 2x  
C.  $x + 200$   
D.  $x + 400$   
& so on....

4. Given that there are 'x' boxes and boxes are filled with equal number of balls. If 3 boxes are filled with 12 balls each, then 5 balls are left after filling. Find the value of 'x'?

(Something like this)

5. Col A:  $1/(0.0001)^{-3}$   
Col B:  $(0.0001)^{-3}$

6. Given three points (5, 9), (x, 1) and (4, 5). If these points lie on a same line, find the value of x?

1. If  $x, y$  and  $z$  are three consecutive integers, such that  $x < y < z$ . Which of the following will be an even integer?

A.  $x - y^2z$   
B.  $((x)^y)^z$   
C.  $(x - y)yz$   
& so on...

Ans: C

2. There are 7 working employees in a company and they work 140 hours extra. If 4 of them work 'p' hours extra and rest 3 work '2p' hours extra then find out the difference between the mean and median of the total extra working hours?

Ans: 6

3. Given  $x, y$  are positive integers. If  $x^2 + y^2 = 17$ , then what is the value of  $x + y$ ?

**Ans: 5**

4. A plane travels 100 miles in a second. How much distance will it cover in one hour?  
(Something like this)

**Ans: 3,60,000 miles**

5. Given a line 'L' passing through point (3, -2) and cutting the coordinate axis.

Col A: Slope of the line 'm' which is perpendicular to line 'l'

Col B: some value (xx)

**Ans: D**

6. A tank contains 'g' gallons of water. The tank has one inlet and one outlet. If the water enters the tank at 'x' gallons/min and flows out at 'y' gallons per minute ( $y > x$ ), at what time the water in the tank will become  $g/2$  gallons?

(Similar to this)

**Ans:  $g/2(y-x)$**

7. Find the y-intercept of the line passing through point (2, 4) and (5,3)?

(Similar to this)

**Ans:  $14/3$**

8. Given on a event, every member of a community exchange cards with every other member. If the postman delivers 420 cards, then how many members are there in the community?

(Something in this)

**Ans: 21**

1. Given a condition  $1/x < 1/x^3 < 1/x^2$ , which of the following value of 'x' satisfies the given condition?

A.  $x = 1/2$

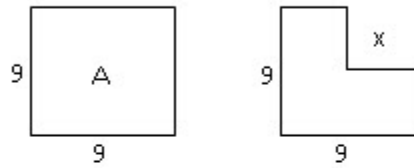
B.  $x = -1/2$

C.  $x = 1/4$

& so on.....

**Ans:  $x = -2$**

2.

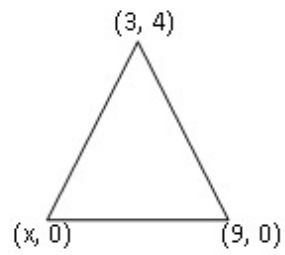


**Col A: Area of square A**

**Col B:  $\frac{4}{3}(81 - x)$**

**Ans: C**

**3.**



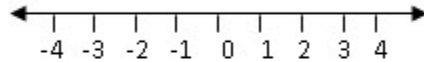
**Given area of the triangle as 12**

**Col A: x**

**Col B: 4**

**Ans: B**

**4.**



Given a number line like above. Find the Arithmetic mean?

**Ans: 0**

5. If  $xy < 0$  and  $yz < 0$ . Which of the following cannot be true?

A.  $x < 0$  and  $z < 0$

B.  $x > 0$  and  $z > 0$

C.  $x < 0$  and  $y < 0$

& so on.....

**Ans: C**

6. Find the remainder of  $[123^2 - 123 + 123^2] / 11$ ?

**Ans: 6**

7. Given that a person invites 10 members to a party, of which 3 are his best friends and 7 are his casual friends. If 2 members are to be selected from 10, find the probability that selected 2 are his best friends?

**Ans:  $1/15$**

8. The value of  $(10^9 + 10^8 + 10^7 + 10^6) \bmod 11$  is .....

**Ans: 0**

9. Given 1000 items are sold with no profit and no loss and remaining items are sold at profit of 0.5 each making a profit of 300\$, find the number of items?

**Ans: 1600**

**10. A liquid is poured into a cylinder of volume  $1000 \text{ m}^3$ . If the height is  $0.1\text{m}$ , find the radius of the cylinder?**

**Ans:  $100/\sqrt{\pi}$**

**11. Given a series 3, 33, 333 ..... find the hundreds digit of the sum of first 10 numbers of the series?**

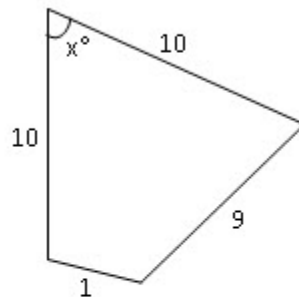
**Ans: 24**

**12. Col A: Area of rectangle having perimeter 20**

**Col B: Area of rectangle having perimeter 24**

**Ans: D**

1.



Col A:  $x$

Col B:  $60^\circ$

**Ans: B**

2. Given that 7 workers spends a total of 140 extra hours. If four workers spends 'h' extra hours each and 3 workers spend '2h' extra hours each, then find the difference between mean and median of the hours?

(Similar to this)



Ans: 6

3. Col A: Number of odd numbers from 100 to 200

Col B: Number of even numbers from 100 to 200

Ans: B

4. A person 'A' saves 'x'dollars more than person 'B', if both of them together saved 'y' dollars, then how many dollars did 'A' save?

(Sufficient Data)

5. In triangle ABC, 'D' is the midpoint of AC and BD is the median. Which of the following angles could be 90degree?

A.  $\angle A$

B.  $\angle B$

C.  $\angle C$

D.  $\angle D$

E. None of the above

(Similar to this)

6. Given x-intercept = 2 and y-intercept = some value(X). Find the equation of the line?

Formula:  $x/a + y/b = 1$

7. Given slope of the line  $k = -2/3$

Col A: x-intercept

Col B: y-intercept

Ans: D

8. Given six symbols @, \$, \$, \$, @, &. Find the number of different possible arrangements?

Ans: 60

1. Col A:  $1/25 + 1/26 + 1/27 + 1/28 + 1/29 + 1/30$

Col B: 0.2

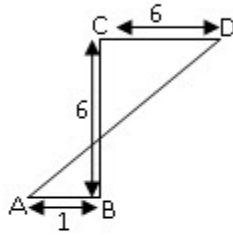
Ans: A

2. Given a line AB of slope 2. What is the slope of other line CD perpendicular to line AB?

(Similar to this)

Ans:  $-1/2$

3.



**What is the value of AD?**

**(Similar to this)**

**Ans:  $\sqrt{85}$**

**4. Given  $(x + 1/x)/(1/(1-x)) = 99$ , find the value of x?**

**5. Given a cylinder with liquid in it. The height of the liquid in the cylinder, when erected is twice when cylinder is bent.**

**Col A: Volume of cylinder when erected**

**Col B: Volume of cylinder when bent**

**Ans: C**

**6. Given  $m = 4^x + 4^x + 4^x + 4^x$ . Find  $m^2$ ?**

**Ans:  $2^{(4x+4)}$**

**7.**

Value	Frequency
-3	3
-2	3
-1	3
0	7
1	3
2	3
3	3

Value	Frequency
-3	5
-2	4
-1	2
0	6
1	1
2	4
3	5

**Which of the following is equal in the above two tables?**

**A. Mean**

**B. Mode**

**C. Mean and Median**

**& so on.....**

**Ans: Median and Mode are equal**

**8. Col A:  $(5 + \frac{1}{4})^2 / (5 - \frac{1}{4})^2$**

**Col B: xxx (some value)**

- 1. If  $m^2 + n^2 = 17$ , what is the value of m and n?**

**Ans: 5**

- 2. If XY is not equal to zero, then**

**Col A:  $|X| + |Y|$**

**Col B:  $X + Y$**

**Ans: D**

- 3. Col A:  $X+Y$**

**Col B:  $|X+Y|$**

**Ans: D**

- 4. There is cistern, a tap which can pump water of quantity  $1000m^3$  per min is opened into it. If in one second the water level rises to 0.1 meter, what is the radius of the cylindrical cistern?**

**Ans:  $100/\sqrt{n}$**

- 5. How many different four consecutive numbers set can be formed from 2 to 20?**

**Ans: 15**

- 6. If 7 workers worked 140 hours extra than usual. Four workers spend X hours extra, 3 workers spend 2X hours extra, Find the difference between median and mean?**

**Ans: 6**

- 7. There are 'X' members in a meeting, in how many ways a group is formed such that 'A' members are always excluded and 'B' members are always included? (Something like this)**

- 1. Col A:  $[5 + (\frac{1}{4})]^2 + [5 - (\frac{1}{4})]^2$**

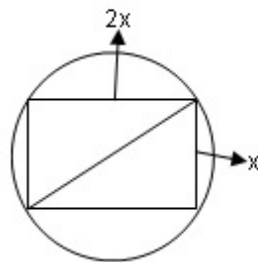
**Col B: 50**

**Ans: A**

- 2. In a triangle ABC, D is the midpoint of AC and BD is the altitude. Which of the following angles can be greater than 90degree?**

- A.  $\angle A$
- B.  $\angle B$
- C.  $\angle C$
- & so on.....

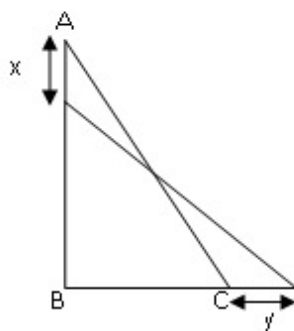
3.



As shown above two lengths of the rectangle are  $2x$  and  $x$ . If the circumference of the circle is  $4\pi\sqrt{5}$ , what is the area of the rectangle?

**Ans: 32**

4.



**As shown above in the figure, AC is ladder and AB is the wall. If the ladder is slided downwards against the wall AB, then**

**Col A:  $x$**

**Col B:  $y$**

**(Similar to this)**

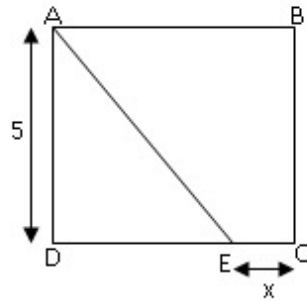
**Ans: D**

**5. Col A: 20% of  $(1/16)$**

**Col B: 25% of  $(0.25)$**

**Ans: B**

**6.**



**What fraction of area of square ABCD is equal to area of triangle?**

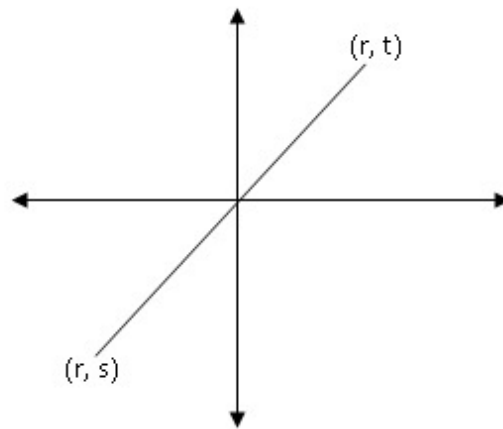
**A.  $(5 - x)/5$**

**B.  $(5 - x)/10$**

**& so on.....**

**Ans: B**

**7.**



Col A:  $s$

Col B:  $-t$

Ans: C

8. Given that there are 'n' employees, of which 70% are lawyers and 55% of these are females. How much percentage of these 'n' employees are male lawyers?

Ans: 31.5

9. If  $a \leq b$ , then

Col A: The remainder when 'a' is divided by 'b'

Col B:  $b/2$

Ans: D

10. In how many maximum parts can a circular region be divided by using 3 lines which cut the circle at exactly 2 places?

Ans: 7

11. Col A:  $1/25 + 1/26 + 1/27 + 1/28 + 1/29 + 1/30$

Col B: 0.2

Ans:: A

12. Col A:  $n^2 + (n+1)^2$

Col B:  $n^2 + (n-1)^2$



**Ans: D**

13. Given 'X' as a set of elements that has numbers between 1 and 100 inclusive and are not divisible by either 5 or 7.

Col A: Number of elements in X

Col B: 68

**Ans: B**

1. Given a  series  $a_1, a_2, \dots, a_n$ . If  $a_1 = 4$ ,  $a_2 = -5$  and  $a_n = a_{(n-1)} + a_{(n-2)}$ , then find the sum of first 100 numbers in the  series?  
[NOTE: The numbers 1, 2, (n- 2), (n-1) and n in the above question are subscripts].

2. Given a set:  $\{k-1, k, k+1, k+2, k+3\}$ . Find the ratio of mean to median?

**Ans: 1**

3. If  $1/(x-y)^{-1} + 1/(x+y)^{-1} = 4$ , then find the possibilities of x and y?

**Ans:  $x = 2$  and  $y = \text{infinite no. of values are possible.}$**

4. Col A:  $1/25 + 1/26 + 1/27 + 1/28 + 1/29 + 1/30$

Col B: 0.2

**Ans: A**

5. What is the 57th decimal digit, when 2 is divided by 7?

**Ans: 5**

6. Given a  series -9, 10, -11, 12, -13, 14 ..... 88.

Col A: Sum of first 27 terms

Col B: -22

**Ans: C**

7. Find the 5th digit, when 142241 is divided by 121?

8. Col A: Angle between the hours hand and minutes hand at quarter past hour.

Col B: 90

**Ans: C**

9. Given a sequence  $k, k-1, k+2, k+1, k+3$ . Find the ratio between mean and median?

- A. 1
  - B.  $2k$
  - C.  $5k$
  - D.  $2k+1$
- & so on.....

**Ans: A**

10. Given a set of numbers 1, 2, 3, 4 and 5, how many different sums i.e.  $(x + y)$  are possible for the set?

**Ans: 7**

11. Given a cone, the specifications of the triangle given were two equal sides  $x$ , one angle  $6$  formed by the two sides and perimeter of semicircle  $50\pi$ . Find the perimeter of triangle?

(Similar to this)

**Ans: 300**

12. Given slope of a line with  $x, y$  intercepts 3, 4 is 'L' and slope of a line with  $x, y$  intercepts 4, 3 is M.

Col A: L

Col B: M

**Ans: B**

13. Col A:  $n^2 + (n - a)^2$

Col B:  $n^2 + (n - b)^2$

(And some relation is given between  $a$  and  $b$ )

14. If  $x < y$ , then

Col A:  $x + y$

Col B: 2

**Ans: B**

15. The average of HEDGERTON town is some 20% of LEIGHTON town, where LEIGHTON town is in HEDGERTON town, but HEDGERTON not included in it.

Col A: Percentage of LEIGHTON town.

Col B: 20%

(Something like this)

16. A number 'n' when divide by 24 gives 21 as remainder. Which of the following can be the quotient?

A. 3

**B. 4**

**C. 5**

**D. 6**

**E. 7**

**(Something like this)**

**17. If  $-1 < r < t < 0$ , then**

**Col A:  $r + rt^2$**

**Col B: -1**

**Ans: D**

answer for Q-2 is 1

u can compare it with  $Q - 9$

The answer would be C only if Col B is -22.

If you look at the first few elements of the  series, it's clear that odd nos. are -ve and even nos. are +ve. So, the series upto 27 terms would look something like this - -9, 10, -11, 12, -13, 14, ..., -31, 32, -33, 34, -35

Another important point is that 2 consecutive elements add up to 1. So, the 1st two terms sum up to 1, the 1st 4 terms add up to 2 ( $1+1$ ), the 1st 6 terms add up to 3 ( $1+1+1$ ). Similarly, the 1st 26 terms add up to 13. Adding the 27th term (i.e., -35) would yield -22

Hope this clears all doubts!

1. What is the probability of selecting an odd  number from 1, 2.....n, such that n is an odd number greater than 50?

2. Given  $(x^2) - 36 = 0$  and  $x(x-6)(x-8) = 0$

Col A: x

Col B: 0

**Ans: A**

3. Rachel brought 'w'kgs of fodder for a week and fed it to some animal. If each animal consumes 'x'kgs of fodder a day, then

Col A:  Number of animals

Col B:  $(7w)/x$

Ans: B

4. If  $(n - 2)^2 = (n + 5)^2$ , then

Col A: n

Col B: -1

Ans: A

5. A person invited 7 people to a party. Of which 3 of them were friends and 4 of them were guests. If 2 people are to be selected from 7 people, find the probability that selected 2 people are his guests?

Ans:  $2/7$

6. Given that two stations 'A' and 'B' are 500 km apart. A train from station 'A' has

started towards  the station 'B' at a certain speed. If after one hour,

another train has started from the station 'B' towards  the station 'A' at

a certain speed. At what distance do they meet from  the station 'B'?

7. If a plane travels 100kms per 't' seconds, how many hours will it take to travel x distance?

(Something like this)

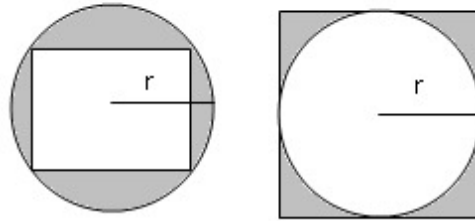
Ans:  $xt/3,60,000$

8. Given that on day1 A and B worked for 10 hrs and produced 5000 books. On the next day 'A' worked for 5 hrs and 'B' worked for 4hrs.

Col A:  Number of books produced on day2

Col B: 4500

Ans: D



9.

Col A: Area of shaded region A

Col B: Area of shaded region B

Ans: A

10. If 7 workers worked 140 hours extra than usual. Four workers spend X hours extra, 3 workers spend 2X hours extra, Find the difference between median and mean?

Ans: 6

11. Col A:  $\sqrt{a^2 + b^2}$

Col B:  $\sqrt{a^2} + \sqrt{b^2}$

Ans: D

12. Given  $xy \neq 0$

Col A:  $|x + y|$

Col B:  $x + y$

Ans: D

13. In a triangle ABC, D is the midpoint of AC and BD is the altitude. Which of the following angles can be greater than 90degree?

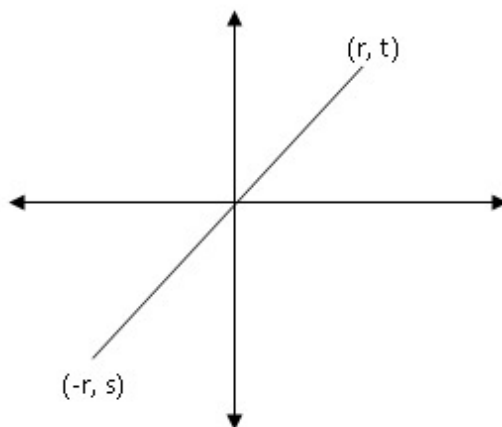
A.  $\angle A$

B.  $\angle B$

C.  $\angle C$

& so on.....

14.



Col A:  $-s$

Col B:  $t$

Ans: C

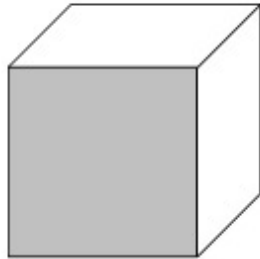
15. Given x-intercept and y-intercept of a line are 3. What is the equation of the line?

Ans:  $x + y = 3$

16. In a right circular tank, water will be following into the tank at the rate of  $1000\text{m}^3/\text{min}$ . If the rise of water level in the tank is 0.1 per minute, find the radius of the tank?

Ans:  $100/\sqrt{\pi}$

17.



Given volume of the cuboid as 12cubic.ft and the length of the cuboid as 6inches, find the surface area of the shaded region?

{Similar to this)

18. Given six symbols \$, \$, \*, &, &, \$. Find the  number of ways in which these symbols can be arranged?

**Ans: 60**

1. Given a series  $k, k-1, k+1, k+3, k+2$ . Find the Median?

**Ans:  $k + 1$**

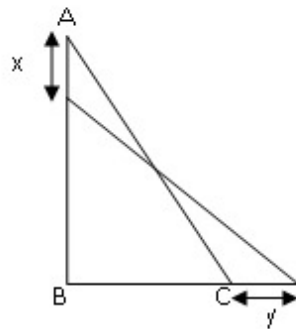
2. In an apartment 92% have cars and 14% have bikes and every one in the apartment have either bike or a car.

Col A: Fraction of the people having either bike or a car

Col B:  $1/10$

**Ans: B**

3.



As shown above in the figure, AC is ladder and AB is the wall. If the ladder is slid downwards against the wall AB, then

Col A:  $x$

Col B:  $y$

(Similar to this)

**Ans: D**

4. From a group of 20 students with 10 boys and 10 girls, a teacher has to select 7 students. If she selects 6 girls, what is the probability that selected 7th student is also a girl?

**Ans:  $\frac{2}{7}$**

5. Col A:  $\frac{1}{25} + \frac{1}{26} + \frac{1}{27} + \frac{1}{28} + \frac{1}{29} + \frac{1}{30}$

Col B: 0.2

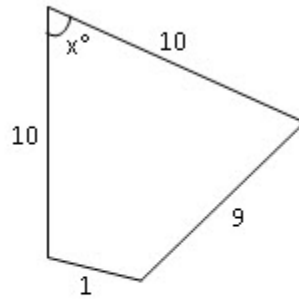
**Ans: A**

6. Given  $M = 4^x + 4^x + 4^x + 4^x$ . Find the value of  $M^2$ ?

**Ans:  $2^{(4x + 4)}$**

7.





Col A:  $x$

Col B: 60degrees

Ans: B

8. Col A:  $(7!)^2$

Col B: 13!

Ans: B

9. Col A: The remainder when  $(10^8 + 10^9 + 10^{10} + 10^{11} + 10^{12})$  divided by 11

Col B: 0

Ans: A

10. Given ' $x$ ' is an integer. What is the minimum value of  $3^x + 3^{-x}$ ?

Ans: 2

11. For a set of consecutive integers, if  $2x + 2$  is the median, what is the mean of the set?

Ans:  $2x + 2$

12. Given that a vehicle travels  $100x$  miles in ' $t$ ' secs. What is time taken in hours to travel ' $y$ ' miles?

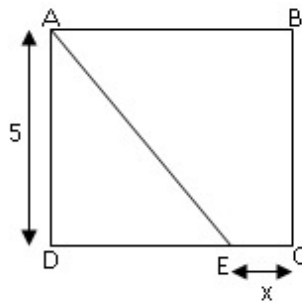
Ans:  $yt/3,60,000x$

13. What is the remainder, when  $(7^6 + 7^7 + 7^8 + 7^9 + 7^{10})$  is divided by 14?

**Ans: 7**

14. Given a cuboid with a face (facing towards us) shaded. If the width of the cuboid is 6 inches, find the surface area of the shaded region?  
(Something similar this)

15.



Find the ratio of area of triangle ADE to the area of square ABCD?

**Ans:  $(5 - x)/10$**

16. Given that a person sells 1000 articles at no profit and no loss. If he sells each item after 1000 articles at 0.5\$, then he gets a profit of 'P'\$. How many such articles did he sold?

(Similar to this)

**Ans:  $2p + 1000$**

1. Given a series  $a_1, a_2, \dots, a_n$ . If  $a_1 = 4$ ,  $a_2 = -5$  and  $a_n = a_{(n-1)} + a_{(n-2)}$ , then find the sum of first 100 numbers in the series?  
[NOTE: 1, 2,  $(n-2)$ ,  $(n-1)$  and  $n$  in the above question are subscripts].

2. Given the probability of raining on each of the five days is  $1/6$ , except on the first day it is  $2/5$  and on the last day it is  $4/5$ . What is the probability that the rain will occur on at least one of the five days?

3. In how many maximum parts can a circular region be divided by using 3 lines which cut the circle at exactly 2 places?

**Ans: 7**

4. What is the minimum value of the expression  $3^x + 3^{-x}$ , where  $x$  is an integer?

**Ans: 2**

5. Given a equation of a line L as  $y = cx + d$ , where  $c < 0$  and  $d = 0$ ;

And equation of a line M as  $y = cx + d$ , where  $c = 0$  and  $d > 0$ .

Col A: Slope of line L

Col B: Slope of line M

**Ans: B**

6. If  $1575 = 5^m \cdot 3^n \cdot 7^p$ , then

Col A:  $m + n + p$

Col B: 5

**Ans: C**

7. Given  $x^2 - 36 = 0$ ;  $x(x+6)(x-8) = 0$

Col A:  $x$

Col B: 0

**Ans: B**

8. Col A:  $(1/25 + 1/26 + 1/27 + 1/28 + 1/29 + 1/30)$

Col B: 0.2

**Ans: A**

1. Given that there are six teams in quiz and their respective scores are 31, 24, 14, 10, 43 & 47 and there are 5 judges for this quiz. What is the minimum number of teams which must get 7 or more than 7 score from any one of the judge?

**Ans: 3**

(if the scores are given in integers)

& **Ans: 2**

(if the scores are given in decimals)

2. A sequence 'S' has the terms  $x_1, x_2, x_3, x_4, x_5, x_6, \dots$  after the first term, each term is half the previous term. If  $x_2 + x_4 + x_6 = 42$ , then what is the value of  $x_1 + x_3 + x_5$ ?

**Ans: 84**

3. A cylinder 'm' of height 2 and radius 3 is given. Now another cylinder 'k' of double the height of previous one and double the radius of previous one is given.

Col A: Double the volume of 'm' cylinder

Col B: volume of cylinder k

**Ans: B**

4. How many four-digit odd numbers are there whose hundredth place is 6 and it is an odd number?

A. 450

B. 650

C. 950

D. 850

& so on...

**Ans: A**

5. If the probability that it rains on day 1 is 70 % and on day 2 is 40% whether it rains on first day or not, then what is the probability that it neither rains on day 1 nor on day 2?

A. 92%

B. 28%

....so on

**Not in the above options**

**Ans: 18%**

6. If 'k' is any positive integer, then

Col A: The remainder when  $5(10^k)+1$  is divided by 3

Col B: The remainder when  $5(100^k)+1$  is divided by 3.

**Ans: C**

7. If  $0 < x < y < z$  and if 'y' is a multiple of 5, then

Col A: The Remainder when ' $x+y+z$ ' divided by 5

Col B: 0

**Ans: D**

1. A person's draw has 14 blue socks and 14 black socks. How many socks must be taken to get a pair of socks of the same color?

A. 13

B. 14  
C. 15  
& so on....  
**Ans: C**

2. If  $N = 5^9 + 7^{10}$ , then  
Col A: What is the least factor of 'N' greater than 1  
Col B: 3  
**Ans: D**

3. There are 28 men in a room in that 14 men are selected out of which 7 are under 50 years  
Col A: Percentage of men under 50  
Col B: 40%  
**Ans: D**

4. A line passing through (5,5) touches x-axis and y-axis at (x,0) and (0,y) respectively.  
Col A: x  
Col B: y  
**Ans: D**

5. Given a diagram of a triangle with three angles x, y & z. If  $x > 90$ , then  
Col A: x  
Col B:  $y + z$   
**Ans: A**

6. Col A: Standard Deviation of 10, 30, 50, 70 & 90  
Col B: Standard Deviation of 10, 45, 50, 55 & 90  
**Ans: A**

7. If 'r' is an integer & 't' is an odd integer, then  
Col A: The remainder when  $(r+t)(t+1)$  is divided by 2  
Col B: 1  
**Ans: B**

8. Given that 'r' is a three digit number such that it contains 'x' in its hundredth place, 'y' in tens place, 'z' in units place. If  $N_r(N \text{ subscript } r)$  is defined as 'x' is multiplied by 9, 'y' is multiplied by 6 and 'z' is multiplied by 2 and the sum of these three products, then what is the value of the  $N_{735}(N \text{ subscript } 735)$ ?  
A. 72  
B. 79  
C. 86

D. 91

Ans: D

1. Col A: 0.9999/0.9998

Col B: 1.0002/1.0001

Ans: A

2. Given a line 'M' in xy-plane and if does not intersect  the line  $x = y$ , then

Col A: Slope of the line 'M'

Col B: 0

Ans: A

3. Find the  quadrant in which  $3x - y < 1$  lies?

A. First Quadrant

B. Second  Quadrant

C. Third  Quadrant

D. Forth  Quadrant

& so on...

Ans: None

4. If the  Standard deviation of  $x, y$  &  $z$  is 'd', then

Col A: Standard Deviation of  $x+1, y+1$  &  $z+1$

Col B:  $d+1$

Ans: B

5. If  $x > 1$  and  $f(x) = 5/((3/1-x)-2)$ , then

Col A: The value of 'x' at which  $f(x)$  is not defined

Col B: 2

Ans: B

6. A person has 'W' kg of grains for one week to feed some iguanas. If each iguana consumes 'x' kg per day then

Col A: Number of iguanas

Col B:  $7w/x$

Ans: B

7. Given that there are 10 bulbs in a box. If two bulbs of them are defective, then find the probability that in three successive draws you get undefected bulbs

(without replacement)?

**Ans:  $8c3/10c3$**

8. If  $8! + 10! = 8! * x$ , then find the value of 'x'?

**Ans: 91**

9. Given a figure of right angled triangle inscribed in a circle and the area of right angled triangle is given & asked to find out the area of circle?

10. If  $k = 10^{(2)} - 10^{(-2)} + 2^{(-2)} - 2^{(-2)}$ , then the value of k is closest to which integer?

**Ans: 100(to the given question)**

11. If  $0 < x < 10$  &  $y = 3x + 5$ , then the number of ordered pairs of 'x' for which 'y' is an integer is?

**Ans: 29**

**For 'y' to be an integer, '3x' should be an integer(As  $y=3x+5$ ).**

**Therefore possible values of '3x' to be an integer are 1, 2, 3, 4, 5, 6, 7, 8, 9 &  $1/3$ ,  $2/3$ ,  $4/3$ ,  $5/3$ ,  $7/3$ ,  $8/3$ ,  $10/3$ ,  $11/3$ ,  $13/3$ ,  $14/3$ ,  $16/3$ ,  $17/3$ ,  $19/3$ ,  $20/3$ ,  $22/3$ ,  $23/3$ ,  $25/3$ ,  $26/3$ ,  $28/3$ ,  $29/3$ .**

12. Given that lines 'k' and 'm' intersect at (1, 1). If 'k' passes through (0, a) and 'm' passes through (0, b) & if the given slope of 'k' is less than 'm', then

Col A: a

Col B: b

**Ans: B**

13. There are some toys and some crates and when these toys are equally distributed in the crates none are left. If there are 3 less crates, then each crate consists of 12 toys with 27 toys left. Find how many toys were there?

**Ans:9**

14. The remainder when 23 is divided by n is 2, then

Col A: n

Col B: 8

**Ans: D**

15. If  $(4/2)*(5/3)*.....(y+2)/y = 12$ , then find the value of y?

**Ans: 7**

16. If we move towards west in [straight line](#) for 6m and then to north for another 16m and then to west again for another 10m, then what is the distance between

starting and ending point?

**Ans:  $16\sqrt{2}$**

17. If  $-1 < k < 1$  and  $-2 < 2m < 4$ , then

Col A:  $k$

Col B:  $m$

**Ans: D**

18. Col A: The remainder when  $(10^{22})+1$  is divided by 11

Col B: 2

**Ans: C**

19. Col A:  $(3^{-10}) + (3^{-9}) + (3^{-9})$

Col B:  $3^{-9}$

**Ans: A**

20. If  $u > 1$ ,  $v > 1$  &  $w > 1$  and if  $u*v*w = 595$ , then find the value of  $u+v+w$ ?

**Ans: 29**

1. Given  $0 < x < 1$ , if  $12x$  is a positive integer then

Col A: Tenths digit of  $x$

Col B: 0

**Ans: D**

2. Col A:  $(7^4+7^5) + (8^6+8^7)$

Col B:  $(7^4(8) + 8^6(9))$

**Ans: C**

3. A sales company, gives Rs.1800 plus 15 percent of the amount from sales to its salesman if his sales are over Rs.12000. If the salesman does a sales of Rs. $x$ , where  $x > 12000$  then

Col A: The Amount the sales man receives

Col B:  $0.15x$

**Ans: A**

4. If a person moves towards west in straight line for 6m and then to north for another 16m and then to west again for another 10m, then

Col A: The distance between starting and ending point

Col B:  $16*1.414$

**Ans: C**

5. If  $0 < x < y < z < w < 1$  and if ' $w$ ' is positive, then

Col A:  $x$



Col B: z

**Ans: B**

6. If a, b, c, d & e are consecutive positive integers, then

Col A: Median of a, b, c, d & e

Col B: Mean of a, b, c, d & e

**Ans: C**

1. If  $f(n) = [(-1)^n] * c * n$ , where c is given as cost of some(xxx). If f(1), f(2) and f(3) are the similar functions and if the difference between the largest and smallest among f(1), f(2) and f(3) is 20, where c is a positive value, then

Col A: f(4)

Col B: 16

**Ans: C**

2. Col A:  $(2m+1)^2$

Col B:  $(2m+2)^2$

**Ans: D**

3. Given the area of the rectangle as 20 and asked to find the perimeter?

**Ans: D**

4. Col A:  $3^{(x^2+1)}$

Col B:  $3^{(x^2+1)^2}$

**Ans: B -- if 'x' is a positive integer, else it is 'D'.**

5. If a number is divisible by 5 the remainder is 3 and when the same number is divided by 7 the remainder is 4. What is the least possible number?

**Ans: 18**

6. There are 'n' number of flags and the number 'n' is odd. If the first flag is red color and the even numbered flags are white, then what are the number of red color flags?

Col A: Number of red flags

Col B:  $n/2$

**Ans: A**

7. If  $0 < x < 10$  &  $y = 2x + 3$  and y is an integer, then find the number of possible sets of (x, y)?

**Sol: For 'y' to be an integer, '2x' should be an integer(As  $y=2x+3$ ).**

Therefore possible values of '2x' to be an integer are 1, 2, 3, 4, 5, 6, 7, 8, 9,  $\frac{1}{2}$ ,  $\frac{3}{2}$ ,  $\frac{5}{2}$ ,  $\frac{7}{2}$ ,  $\frac{9}{2}$ ,  $\frac{11}{2}$ ,  $\frac{13}{2}$ ,  $\frac{15}{2}$ ,  $\frac{17}{2}$  &  $\frac{19}{2}$ .

Ans: 19.

8. If  $0.0625y = x \cdot (2.5)/4$

Col A: x

Col B: y

Ans: B

9. If consider the line  $3x - y < 1$ , then in which quadrant the line lie?

A. First Quadrant

B. Second Quadrant

C. Third Quadrant

D. Fourth Quadrant

E. All

Ans: E

10. Given that a person travels in a circular path of diameter 2cm. If the total distance traveled by him is 314cm, then find the number of revolutions made by him?

Ans: 50

1. If  $\frac{3}{13} < x < \frac{4}{13}$ , then the possible value of x is?

A.  $\frac{9}{26}$

B.  $\frac{17}{52}$

C.  $\frac{19}{65}$

& so on....

Ans: C

2. If  $b = \text{mod}(15x + 20y)$ , then

Col A: The smallest possible value of 'b'

Col B: 10

Ans: B

3. If  $2.8! + 10! = x \cdot 8!$ , then the value of x is?

Ans: 92

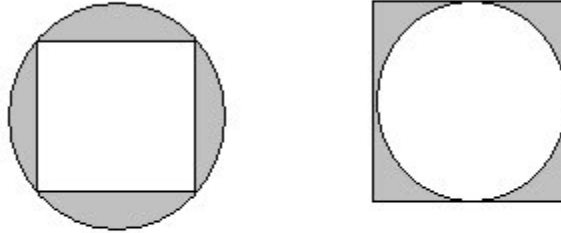
4. If  $x^2 + 2x + f = 0$  &  $x^2 + 4x + g = 0$ , then

Col A: f

Col B: g

Ans: Cannot be determined

5.



If the radius of the above two circles is 'r', then

Col A: Area of the shaded region of A

Col B: Area of the shaded region of B

**Ans: A**

6. Given a triangle inscribed in a circle with angles  $x$ ,  $y$  &  $z$ . If  $x = y$ , then

Col A:  $x$

Col B:  $z$

**Ans: Cannot be determined**

7. Col A:  $0.9999/0.9998$

Col B:  $1.0002/1.0001$

**Ans: A**

8. If a box contains 10 machines, in which 3 are defective then find the probability that none are defective?

**Ans:  $7/10$**

9. Col A:  $3^{(x^2 + 1)}$

Col B:  $3^{(x^2 + 1)^2}$

**Ans: Cannot be determined**

10. Given  $R1 = (-1, 0, 1)$ ,  $R2 = (1, 1, 2)$  &  $R3 = (-3, -2, -1, 0, 1, 2, 3)$  and  $s1$ ,  $s2$  &  $s3$  are the standard deviations of  $R1$ ,  $R2$  and  $R3$  respectively.

i.  $s1 > s2$

ii.  $s2 > 5$

iii.  $s3 > 0$

A. None

B. I & II

C. II & III

& so on...

**Ans: Only condition iii satisfies.**

11. Col A:  $\sqrt{2} * \sqrt{6} * \sqrt{21}$

Col B: 9

**Ans: A**

12. Col A: Median of days in February in a leap year.

Col B: Median of days in February in a non-leap year.

**Ans: A**

13. In an examination, number of marks was given like twice the number of correct questions minus number of wrong questions. If a [student](#) gets 100 marks, then

Col A: Number of question he answered correctly

Col B: 50

**Ans: A**

14. If a man covers half of the distance in 9 hours at an average rate of 35mph and if he had to cover the whole distance in 'T' hours, then what is the rate in terms of 'T' for the next half distance?

**Ans:  $315/(T-9)$**

Quant:

1. If  $x > 1$  and  $f(x) = 5/((3/1-x)-2)$ , then

Col A: The value of 'x' at which  $f(x)$  is not defined

**Col B: 2**

**Ans: B**

2. Given a square ABCD within which another square EFGH is inserted such that 'E' lies on AB & 'F' lies on BC. If AH = 3 & HD = 2, then

Col A: Perimeter of ABFH

Col B: Perimeter of square EFGH

**Ans: A**

3. If 'x' is a negative integer, then

Col A:  $(\frac{4}{3})^x$

Col B:  $(\frac{3}{4})^{-x}$

Ans: C

4. The following was stated in the form of table.

In experiment 'P' there are 10 samples in which the least value(of weights) is 105 & range is 10.

In experiment 'Q' there are 11 samples in which the least value(of weights) is 120 & range is 12.

Col A: The median of samples of "P+Q"

Col B: 120

Ans: C

5. If  $a > 1$ , then

Col A:  $a^2 - 1$

Col B:  $a + 1$

Ans: D

6. How many four-digit odd numbers are there whose hundredth place is 6 and it is an odd number?

A. 450

B. 650

C. 950

D. 850

E. 750

Ans: A

7. If  $\frac{x}{2} + \frac{x}{5} = 1 - \frac{x}{3}$  and if  $xy =$  some fraction, then

Col A: x

Col B: y

(something like this)

8. If  $12 \leq a \leq 15$  and  $a + b = 5$ , then find the value of  $a - b$ ?

Ans: This is an optional based question.

To the given question, four different values are possible

i.  $a = 12$  &  $b = -7$ , then  $a - b = 19$

- ii.  $a = 13$  &  $b = -8$ , then  $a-b = 21$   
 iii.  $a = 14$  &  $b = -9$ , then  $a-b = 23$   
 iv.  $a = 15$  &  $b = -10$ , then  $a-b = 25$

9. If  $(x-1/x)/(1+1/x) = 99$ , then find the value of  $(x-1/x)/(1-1/x)$ ?

10. If 'W' is the width of the rectangle and 'R' is the area of the rectangle where  $r > 0$ , then

Col A: Perimeter of rectangle

Col B:  $2W+2R/W$

Ans: C

11. If a, b & c are all positive integers numbers and if  $a*b*c = 66$ , then what is the value of  $a+b+c$ ?

Ans: If it is mentioned as 'prime numbers' in the question, then possible solution for the question is  $a = 2$ ,  $b = 3$  &  $c = 11$ , So  $a+b+c = 16$ .  
 Else you get 3 more possible sets

$a = 1$ ,  $b = 6$  &  $c = 11$ ;  Ans = 18

$a = 1$ ,  $b = 22$  &  $c = 3$ ;  Ans = 26

$a = 1$ ,  $b = 33$  &  $c = 2$ ;  Ans = 36

12. Given a figure of a triangle with vertices (5, 0), (t, 0) and (6, 4) & area was also given, asked to find the value of 't'?

13. Col A:  $(7^4+7^5) + (8^6+8^7)$

Col B:  $(7^4(8) + 8^6(9))$

Ans: C

14. A sales company, gives Rs.1800 plus 15 percent of the amount from sales to its salesman if his sales are over Rs.12000. If the salesman does a sales of Rs.x, where  $x > 12000$  then

Col A: The Amount the sales man receives

Col B:  $0.15x$

Ans: A

15.  Col A: The remainder when  $(10^{22})+1$  is divided by 11

Col B: 2

Ans: C

1. Given a series of numbers  $(-0.5)^{-2}$ ,  $(-0.5)^{-1}$ ,  $(-0.5)^0$ ,  $(-0.5)^1$ ,  $(-0.5)^2$ , find the range of the series?

Ans: 6

2. If  $x^2 = y$ , then

Col A:  $5x/y$

Col B:  $x^2$

Ans: D

3. Given  a square inscribed in a circle, then

Col A: The radius of the circle

Col B: The side of the square

Ans: B

4. If  $g(x) = |x|$  for  $x < 1$  &  
 $g(x) = |x-1|$  for  $x > 1$ , then  
find the value of  $g(-2)-g(2)$ ?

Ans: 1

5. Given a line passes through  $(-1, -1)$ ,  $(100, 101)$  &  $(x, 3)$ , find the value of 'x'?

Ans: 151/51

6. There are 10 numbers in a sequence the starting number is 5, the rest are obtained by doubling the preceding number and subtracting 3, then what is the 4th number?

Ans: 19

7. The approximate value of  $61.19(0.98)^2/\sqrt{401}$  is?

Ans: 3

8. Given two points  $(-1, 3)$  and  $(4, 4)$ . Find the slope of it?

Ans: 1/5

9. Given three values as  $d_1 = 2$ ,  $d_2 = 3$  and  $d_3 = 4$ , then

Col A: -2

Col B:  $d1(d2 - d1 \cdot d3)$

Ans: A

10. If  $0.0625y = x \cdot (2.5)/4$

Col A: x

Col B: y

Ans: D

11. A right triangle was drawn and a square was drawn by considering each side of triangle as its side.

Col A: The area of the square formed with hypotenuse as side

Col B: The sum of two other squares

Ans: C

12. Given  $b = \text{mod}(15x + 20y)$ , where x and y are integers. If x, y are not equal to 0 and if 'b' should be a non-zero integer, then

Col A: The smallest positive value of b

Col B: 5

Ans: C

13. If  $k/m = m/r = 4/5$  & if  $k = 6$ , then what is the value of r?

Ans:  $6 \cdot (5/4)^2$

14. Col A:  $10^{30}$

Col B:  $0.001^{(-10)}$

Ans: C

Quant:

1. If a person moves towards west in straight line for 6m and then to north for another 16m and then to west again for another 10m, then

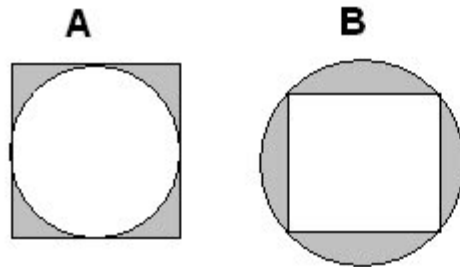
Col A: The distance between starting and ending point

Col B:  $16 \cdot 1.414$

Ans: C

2.





If the radius of the above two circles is 'r', then

Col A: Area of the shaded region of A

Col B: Area of the shaded region of B

**Ans: A**

3.If the Standard deviation of x, y & z is 'd', then

Col A: Standard Deviation of  $x+1$ ,  $y+1$  &  $z+1$

Col B:  $d+1$

**Ans: B**

4.Given a square ABCD within which another square EFGH is inserted such that 'E' lies on AB & 'F' lies on BC. If AH = 3 & HD = 2, then

Col A: Perimeter of ABFH

Col B: Perimeter of square EFGH

**Ans: A**

5.Col A:  $10^{30}$

Col B:  $0.001^{(-10)}$

**Ans: C**

6. Find the quadrant in which  $3x - y < 1$  lies?

- A. First Quadrant
- B. Second Quadrant
- C. Third Quadrant
- D. Forth Quadrant
- E. All

**Ans: E**

7.If  $\frac{3}{13} < x < \frac{4}{13}$ , then which of the following could be a possible value of x?

- A.  $\frac{9}{26}$
- B.  $\frac{14}{39}$
- C.  $\frac{17}{52}$
- D.  $\frac{19}{65}$
- & so on....

**Ans: D**

Quant:

1. There are 90 cows which are either white or brown or a combination of white and brown. If 55 of them are white or partially white and 75 are brown or partially brown, then how many of them are of mixed colors?

**Ans: 40**

2. If  $a * b = ab + 5$ , then which is greater?

Col A:  $-1*(2*3)$

Col B:  $(-1*2)*3$

**Ans: B**

3. If the perimeter of a fence is 12 sq.cms, then

Col A: Area of the fence, if it is of square shape

Col B: Area of the fence, if it is of circular shape

**Ans: B**

4. Col A:  $|a+8|$

Col B:  $|a|+7$

**Ans: D**

5. Given the mean of 18 numbers as 'm' and standard Deviation as 's'. If two numbers among 18 numbers are equal to m, then

Col A: Standard Deviation of rest 16 numbers

Col B: s

**Ans: A**

6. The value of  $\frac{1}{(1/9 + 1/9 + 1/9)}$  is ....?

**Ans: 3**

7. If  $x(n-1) - x_n = n + 1$ , for  $n = 1$  to 5 and if  $x_4 = 15$ , then what is the value of  $x_5$ ?

**Ans: 9**

8. If  $(n \# a) = ((n!))/([(a!)(n-a)!])$ , then

Col A: (16 # 4)

Col B (16 # 3)

**Ans: A**

9. If Perimeter of a square is  $2+2\sqrt{2}$ , then what is its area?

**Ans:  $(3 + 2\sqrt{2})/4$**

**Quant:**

1. There are 90 cows which are either white or brown or a combination of white and brown. If 55 of them are white or partially white and 75 are brown or partially brown, then how many of them are completely white?

**Ans: 15**

2. Given an isosceles right angled triangle of perimeter  $2+2\sqrt{2}$ . Find its area?

**Ans: 1**

3. Given volume of two cubes 'A' and 'B' as 1728cubic.mts and 13824cubic.mts

Col A: The ratio of their surface area

Col B:  $1/2$

(Similar to this)

**Ans: B**

4. Given the mean of 18 numbers as 'm' and standard Deviation as 's'. If two numbers among 18 numbers are equal to m, then

Col A: Standard Deviation of rest 16 numbers

Col B: s

**Ans: A**

5. The value of  $1/(1/9 + 1/9 + 1/9)$  is ....?

**Ans: 3**

6. On a sales of \$250,000, if a person gets a commission of \$6000 which is 5% of profit, then what are his earnings, if his commission is 3% of profit?

**Ans: \$3600**

@AC ...

passes through (00) origin ..so no constant ..

then use this  $(y-y_1)=m(x-x_1)$ ..where  $(x_1,y_1)$  are the passing points ..then (00)..so  $y=mx$ .. $y=(-2/3)x$ ...implies  $2x-3y=0$ .is the line equation

Quant:

1. Given two concentric circles, one inscribed in another. If the radius of the inner circle is 'x' & the radius of the outer circle is '(x+y)', then what is the probability that the point taken lie in the inner circle?

- A.  $\pi x^2/(x+y)$
  - B.  $x^2/(x+y)^2$
  - C.  $x^2/(x^2+y^2)$
  - D.  $x/(x+y)$
- & so on....

**Ans: B**

2. Given price of a article as 'p' and is increased by r% to give a new price 'q' and then price of 'q' is reduced by s% to give original price.

Col A: r

Col B: s

**Ans: A**

3. If a, b and x are positive integers & if  $a/b > 1$ , then

Col A:  $a+x/b+x$

Col B:  $a/b$

**Ans: B**

4. If the range of 6 consecutive positive numbers is 6.8 and of 7 consecutive numbers is 13.2. If none of these numbers in the two groups are same, then find the range of the 13 numbers?

**Ans: Cannot be determined**

5. If  $-6 \leq x \leq 4$  &  $-10 \leq y \leq 4$ , then what is the greatest possible value of  $-x^2 + y^4$ ?

**Ans: 10,000**

6. When a number is divided by 12, the remainder is 5. What is the remainder when the square of that number is divided by 8?

**Ans: 1**

7. Given a triangle with sides x, y & z. If  $z = 1/4(\text{perimeter of triangle})$  and  $x + y = 12$ , then find the value of z?

**Ans: 4**

Hi,

Is it possible for you to post all the quantitative question solution with explanation

I am scheduled to take my GRE on 30 / 3

I appreciate the help

1. Given area of a circle as 72sq.m. If sector angle of the circle is 135 degree, then what percentage of area of circle is covered by sector area?

**Ans: 62.5%**

2. Given  $10 < 2x < 16$  and  $10 < x+4 < 15$

Col A:  $x$

Col B: 7

**Ans: C**

3. Given a triangle ABC. A point 'D' divides the side AB such that a triangle ADC is formed and  $AD/DB=1/3$ . If the area of the triangle ABC is 'r', then find the area of the triangle ADC in terms of 'r'?

**Ans:  $r/4$**

4. Given a cylinder C1 having volume 'V'. If another cylinder C2 is given, that had both radius and height twice that of cylinder C1, then what is the volume of second cylinder in terms of 'V'?

**Ans: 8V**

5. If  $0 < x < y < z$ , then

Col A: Mean of  $x, y, z$

Col B: Median of  $x, y, z$

**Ans: D**

6. If P1, P2 pipes together can fill a tank in 8 hrs and P3 pipe can fill in 12 hrs, then how much time will P1, P2 & P3 together takes to fill the tank?

**Ans: 4.8hrs**

---

Admin,  
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no the logic is as

1st condition gives  $5 < X < 8$

2nd gives  $6 < X < 12$

Combining both we get  $6 < X < 8$

hence C given X is an integer

**Quant:**

**1. If  $0 < x < y < z$ , then**

**Col A:  $x/y$**

**Col B:  $y/z$**

**Ans: D**

**2. If a cab-for-hire company costs \$1.75 for the first quarter mile and fifteen cents for each additional quarter mile, then what is the maximum distance you can travel with \$4.90?**

**Ans: 5.5miles**

**3. If a person A takes 4hrs to complete a job and person B takes 6hrs to complete the same job, & if they work together then how much time will they require to complete the work?**

**Ans: 2.4hrs**

**4. Given a series 7, 8, 13, 13, 9, 14, 15, 15, 15, 19. If another number 15 is included in the series, then which will be most affected?**

**A. Mean**

**B. Median**

**C. Mode**

**D. None**

**Ans: B**

**5. If  $x, y > 0$  and  $x - y = 1$ , then**

**Col A:  $x^2 - y^2$**

**Col B: 0**

**Ans: A**

**6. If a number 'n' is divided by 24, the remainder is 21. Which of the following is the divisor of n?**

**A. 3**

**B. 5**

**C. 6**

**& so on....**

**Ans: A**

**7. Given a circle with center 'O' and with two tangents at points 'B' and 'C' which intersect each other at point 'A'. If the angle BAC is given as 55degrees, then**

**Col A: The value of angle BOC**

**Col B: xxx(some angle)**

**Ans: Angle BOC = 125degrees**

---

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**1. If the area of a square is 24sq.m, then**

**Col A: Length of the side**

**Col B: Length of the diagonal**

**Ans: B**

**2. Col A:  $100^2$**

**Col B:  $2^{100}$**

**Ans: B**

**3. The remainder when 23 is divided by n is 2, then**

**Col A: n**

**Col B: 8**

**Ans: D**

**4.Col A:  $10^{30}$**

**Col B:  $0.001^{(-10)}$**

**Ans: C**

**5. A company sold a product for 'x' dollars in 1990. If the price of product increases by 2.5% every year, then what is the price of the product in the year 2000?**

**Ans:  $x \cdot (1.025)^{10}$**

**6. A salesman gets 12% commission on the sales up to \$500 and he gets 20% commission on the further sales amount on that day. If the salesman's total commission is \$380 on that day, then how much amount did he sell on that day?**

**Ans: 2100\$**

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**Quant:**

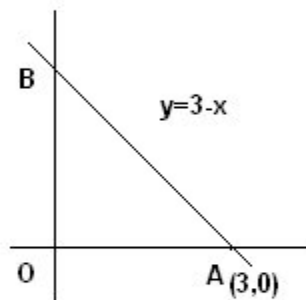
**1. If  $x > 0$  and  $y > 0$ , then**

**Col A:  $\sqrt{xy}$**

**Col B:  $\sqrt{x+y}$**

**Ans: D**

**2.**



**Col A: Perimeter of the triangle AOB**

**Col B: some value(xxx)**

**(Something like this)**

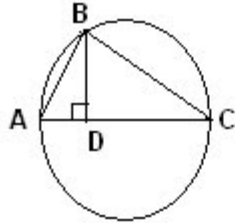
**Ans:  $3[\sqrt{2}+2]$**

**3.The value of  $10^{15} - 10^{14} / 10^3$  is .....**

**Ans:  $9 \cdot 10^{11}$**

**4.**





If the circumference of the circle is  $4\pi$  and if the area of the triangle is 2, then

Col A: Length of BD

Col B: some value(xx)

(Similar to this)

**Ans: 1**

5.If the number of experienced people in an office is 7% , then

Col A: The total number of people in the office

Col B: 100

**Ans: D**

6.Col A: Area of the rectangle whose length is 4m and perimeter is 14m

Col B: Area of rectangle having length 5m and breadth 3m

**Ans: B**

7.If  $t^2 + 6t + 9 = 0$ , then

Col A: t

Col B: -3

**Ans: C**

**8.If the probability of A wins the race is  $\frac{1}{5}$  and 'B' wins the race is  $\frac{1}{8}$ , then what is the probability the neither of them wins the race?**

**Ans:  $\frac{7}{10}$**

**9.Given a series  $f_1, f_2, f_3, f_4, \dots, f_n$ , such that every number is sum of its two previous numbers. If  $f_5 = 18$  and  $f_8 = 76$ , then what is the value of  $f_9$ ?**

**Ans: 123**

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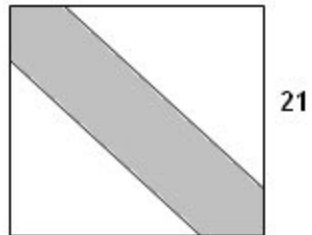
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**Quant:**

**1.If 'C' apples cost 'x' cents, then how many apples could be bought for 'd' dollars?**

**Ans:  $C*d*100/x$**

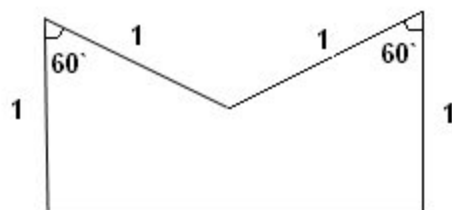
**2.**



**If the length of the side of the square is 21, then find the area of the shaded region?**

**Ans: To the given data, it cannot be determined.**

**3.**



**Find the length of the base?**

**Ans: Sqrt(3)**

**4.If  $0 < x < 1$  and  $x^2 \cdot y^2 = 3$ , then**

**Col A:  $x + y$**

**Col B: 3**

**Ans: D**

**5.  $4 - (1/129) / 2 - (1/89) =$**

**A.  $2/5$**

**B.  $4/5$**

**C.  $3/8$**

**D.  $7/3$**

**& so on.....**

**Answer is some around near to option 'D'**

**6. Given the present age of person 'X' is twice the age of person 'Y'. If the ratio of their ages 5 years hence is 9:5, then what is the difference between their present ages?**

**Ans: 20**

**7. If a number 'n' is divided by 24, the remainder is 21. Which of the following is the divisor of n?**

- A. 3**
- B. 4**
- C. 5**
- D. 6**
- E. 7**

**Ans: A**

question number 7 can be solved as follows

$$N = 24p + 21$$

$p=1$  ,  $N = 24 + 21 = 45$  , only 3 and 5 divide it

$p=2$  ,  $N = 69$  , only 3 divides it hence answer is 3

**1. If  $0 < t < u < v$ , then**

**Col A: Mean of  $t, u, v$**

**Col B: Median of  $t, u, v$**

**Ans: D**

**2. Given the average of seven numbers as 35. When 'k' is added to it then the average of those 8 is 35. Find the value of k?**

**Ans: 35**

**3. Given a series  $a_1, a_2, a_3, \dots, a_n$ . If  $a_n = (1/n) - (1/(n+1))$ , then find the value of  $S_{100}$ ?**

**Ans: 100/101**

**4. Given  $|x| = |y|$  &  $xy < 0$**

**Col a :  $x+y$**

**Col b : 0**

**Ans: C**

**5. Given a Rectangular cylinder with volume 1800. If the height of rectangular cylinder is 6 times more than its radius then find the radius of the cylinder?**

**Ans: cube root(1800/22)**

**6. Given stock price at end of February as x. If stock price increase in March is 10% & increase in April is again 10% and if May price = 70% of April price, then**

**Col A: The May price**

**Col B: 0.9x**

**Ans: B**

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**Quant:**

**1.  $10^5 * 10^4 / 10^3 =$**

**A.  $10^{10}$**

**B.  $10^7$**

**C.  $10^6$**

**D.  $10^3$**

**& so on....**

**Ans: C**

**2. Given a series.**

**1,  $1/(2t)$ ,  $1/(2)^{2*t}$ ,  $1/(2)^{2*(t)^2}$  .....**

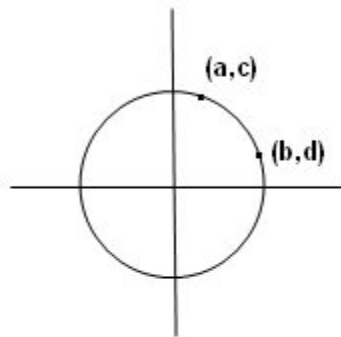
**For  $t=2$ , if odd terms are  $1/2$  times the previous number and even terms are  $1/(t)$  times the previous number, then**

**Col A: The eight term (8th) in the series**

**Col B:  $1/(2)^8$**

**Ans: C**

**3.**



**Col A:**  $a+d$

**Col B:**  $b+c$

**Abs:** **D**

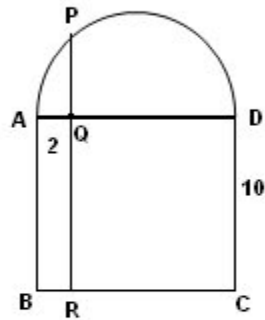
**4.** Given two points  $P(4,2)$  &  $Q(3,3)$ .

**Col A:** Distance of point 'P' from origin

**Col B:** Distance of point 'Q' from origin

**Ans:** **A**

**5.**



In the figure above, it is a semicircle drawn on a square of side length 10m. And now, find the length of PR?

**Ans: 14**

6. If  $(x-5)(2x+1) - (x-5)(x-7) = 0$ , then what is the least possible value of 'x'?

**Ans: -8**

7. Find the surface area of a cuboid of length 6ft, width  $\frac{1}{6}$ ft and height  $\frac{1}{3}$ ft?

**Ans: 6.11**

8. In a contest, there are 5 judges who are to rate (they can rate from 0-10) the scores of 8 different groups.

Category Scores

Solo 14

Group 17

xxxx 25

xxxx 29

xxxx 31

xxxx 35

xxxx 44

xxxx 49

What is the minimum number of teams, which must get 7 or more than 7 score from at least one judge?

(Similar to this)

**Ans: 4**



**9. In a company 'X', if the average arithmetic mean of number of years of experience, for men is 8.5years & for women is 7.5years and for the total employees is 7.9years, then**

**Col A: Number of men in the company**

**Col B: Number of women in the company**

**Ans: B**

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Let x be total num of employees and y total num of men....now  $\{8.5x + 7.5(x-y)\} / (x-y+y) = 7.9$

$$8.5x + 7.5x - 7.5y = 7.9x$$

$$Y = 0.4x$$

$$Y = 40\% \text{ of } x$$

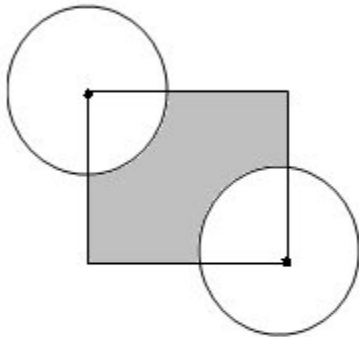
Women are 60% of x

**Quant:**

**1.What is the median of the series 10, 10, 8, 8, 8, 11, 11, 11?**

**Ans: 10**

**2.**



If the side length of the square is 5 & radius of the circle is 3, then what is the area of the shaded region?

**Ans: 10.85**

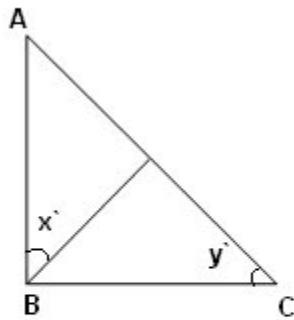
3.If  $0 < x < y < z$ , then

Col A:  $x/y$

Col B:  $y/z$

**Ans: D**

4.



Col A:  $x$

Col B:  $y$

**Ans: D**

5.If  $0 < x < 4$ , then

Col A:  $x^3$

Col B:  $x^2$

**Ans: D**

6.If 'A' takes 6 days to complete a work and 'B' takes 8 days to complete the same work, then how days it takes if they work together?

**Ans:  $3\frac{3}{7}$  (or) 3.4days**

7.In set of numbers 1, 2, 3, 4, 5 & 6, if two numbers are selected at random, then what is the probability of getting their sum '8'?

**Ans:  $\frac{2}{15}$**

8.When 'K' is divided by 3, the remainder is '1' and when 'K+1' is divided by 5, the remainder is '0', then what is the possible value of 'K'?

A.60

B.61

C.62

D.63

E.64

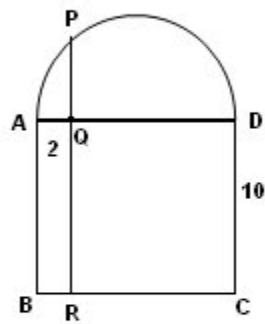
**Ans: E**

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**Quant:**

**1.**



**Find the length of the line segment PQR?**

**Ans: 14**

**2.A man buys 'W'kgs of dog food once in a week and 'x'kgs of the food is given to each dog twice a day.**

**Col A: Number of dogs**

**Col B:  $W/7x$**

**Ans: C**

**3.If  $(x - y) = \text{odd value}$  and K is an integer, which of the following is always odd?**

**A. x**

**B. y**

**C.  $k(x-y)$**

**D.  $(x-y)^2$**

**E.  $(x-y+k)$**

**Ans: D**

4.If  $x < y < z$ , then

Col A:  $xy$

Col B:  $yz$

Ans: D

5.Given that the time taken by a train to travel a distance 'd' is 'h'hrs and the next day the train travels the same distance but reaches 15 min early. What is the average speed on that day?

Ans:  $4d/(4h-1)$

6.A price of a product 'x' is increased by p% to give new price 'y' and then price of 'y' is reduced by r% to give original price.

Col A: p

Col B: r

Ans: A

7.Given a sequence  $a_1, a_2, \dots, a_n$ . If  $a_1 = 25$  & in the sequence if every number is '-2' times the preceding number, then

Col A:  $a_{100}$

Col B: -10,000

Ans: B

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Quant:

1. If  $xy > 0$ , then

Col A:  $x^4 * y^3$

Col B: 0

Ans: D

2. If  $x \neq 0$ , then

Col A:  $(x/2)^2$

Col B:  $x^2/2$

Ans: B

3. Given the average of a set of 7 numbers as 45. If 2 numbers are removed from the set, then the average of 5 numbers becomes 40. Find the average of removed numbers (two)?

Ans: 57.5

4. Given a set of four values.

12, 13, 14, 15.

Which of the following operations cannot be done, such that the arithmetic mean of the set can be altered and standard deviation of the set cannot be altered?

- A. Adding 11 to each number in the set
- B. Multiplying 2 to each number in the set
- C. Adding 3 to each number in the set
- D. Addition of 20 to each number in the set
- E. Replacing 15 in the set by 20.

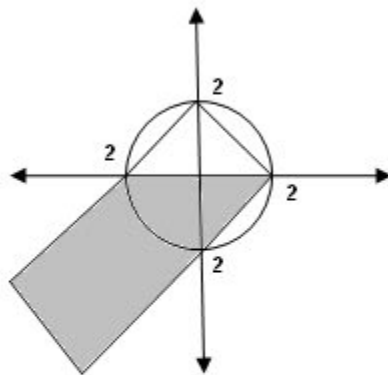
**Ans: E**

5. Col A:  $(\sqrt{30} - \sqrt{13})^3$

Col B:  $\sqrt{30} - \sqrt{13}$

**Ans: A**

6.



If the area of the rectangle is 12, then what is the area of the shaded region?

**Ans: 8**

7. A cylinder 'A' has height 2 and radius 3 and another cylinder 'B' has the height and radius twice that of 'A'.

Col A: Twice the volume of cylinder 'A'

Col B: Volume of cylinder 'B'

**Ans: B**

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